University of Derby

Learning and Growth Processes Facilitated in 9 to 12 Year Olds Challenged with ADHD Enrolled on a Therapeutic Horseback Riding Programme

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Abstract:

This study investigated the outcomes and practice of Therapeutic Horseback Riding (THR) for children aged 9 to 12 diagnosed with Attention Deficit with Hyperactivity Disorder (ADHD). The study was carried out in order to gain new insights in the learning and growth processes facilitated by Therapeutic Horseback Riding (THR) and to improve practice. Two learning and growth processes were identified and investigated: establishing a therapeutic vision and infusing it into the therapeutic plan and facilitating the transfer of newly learned or improved skills and learning strategies from the riding learning environment to parallel learning environments such as the client's school and home.

The research also explored ways to amplify levels of skill acquired during THR sessions and to support the transformation process experienced by THR clients.

A pilot exploratory survey was conducted among THR practitioners and participating parents. In depth interviews and observations were conducted.

A multiple case study paradigm was selected for the purpose of the study. In depth interviews were conducted with children diagnosed with ADHD, parents, and teachers. In addition, relevant documents were examined.

A THR manual for practitioners was developed to support and inform learning partnerships between school (teachers), THR practitioners (THRPs) and children and their family, in order to standardise THR practice.

The findings of this research showed that the THR practitioners (THRPs) should facilitate the acquisition and transfer of skills and strategies learned during THR sessions to other environments, such as family and school, in order to improve the quality of life of children diagnosed having ADHD. The Knowing Therapeutic Horseback Riding (KTR) model of THR practice emerged and was shown to be effective in promoting a learning and growth partnership between school, THR practitioner, client and his family. The KTR model calls for the nurturing of this partnership in order to support the learned skills and amplify them.

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Dissertation Glossary:

Amplification - Hayes (2005) has found that learning can be amplified by multiplying the sites of learning in school. de Shazer (1988) used the amplification effect in short-term therapy. The KTR model achieves amplification by reflecting on successes and by celebrating them in three learning environments (school, home and riding arena).

Attention Deficit Hyperactive Disorder (ADHD) – A range of disorders in individuals (physical, cognitive and behavioural), that include difficulties in organisation, poor concentration, an inability to focus on tasks, difficulty with paying attention and impulsivity.

Case management – Used by several health care professions, the paradigm refers to the management of complex systems by facilitating the collaboration between their parts. In the context of this dissertation it is applied to the practice of therapeutic horseback riding, where collaboration and coordination between the parents of the client, the home room teacher, the client and the therapeutic horseback practitioner are necessary in order to facilitate the amplification and the transfer of skills, learned in the riding arena, to the home and the school.

Case manager – The person who is responsible for the facilitation of collaboration and coordination between the client's parents, the homeroom teacher, the client and the therapeutic horseback practitioner.

Chaining of Skills - The chaining of skills involves linking discrete skills together in a series, such that each skill used elicits the next skill. The chaining of skills in therapeutic horseback riding is taught by starting with the use of the first skill in the chain and proceeding step by step to the end of the chain. It is also possible to teach a chain of skills using the technique of 'total task chaining' in which the entire chain of skills is taught from beginning to end, rather than as a series of steps. Total task chaining is a technique that involves teaching the entire task as a single series, prompting through all steps. Prompts are faded (reduced) at each step as the step is completed (Ferster and Skinner, 1957).

Developmental Map (Genetic Map and Social Map) - Erikson and Newton (1973) proposed a model for human development that conceptualized eight stages

of development. In order to successfully negotiate these developmental stages a child is endowed with two maps: a genetic map and a social (environmental) map. In order to maximize the rate of development and successfully negotiate the challenges each of the developmental stages has in store, the growing child must navigate using both maps to his advantage (Friedman, 2000).

EAGALA – The Equine Assisted Growth and Learning Association is a non-profit organisation developed to address the need for resources, education and professionalism in the field of Equine Assisted Psychotherapy.

High five – The 'high five' is a celebratory hand gesture that occurs when two people simultaneously raise one hand, about head high, and push, slide or slap the flat of their palm and hand against the palm and flat hand of their partner. The gesture is often preceded verbally by the phrase "Give me five" or "High five".

Hippotherapy - A treatment with the help of a horse, from the Greek word hippos meaning horse. According to the American Hippotherapy Association, Hippotherapy is "a term that refers to the use of the movement of the horse a strategy by Physical Therapists, Occupational Therapists and Speech-Language Pathologists to address impairments, functional limitations and disabilities in patients with neuromusculoskeletal dysfunction. This strategy is used as part of an integrated treatment programme to achieve functional outcomes" (NARHA, 2000).

Intake – An intake session is the first meeting between the therapist and the client. During this session background information is obtained and the client therapeutic objectives are explored. The primary purposes of the intake are to priorities therapeutic objectives and validate them with the help of the participating parent.

Learning Environment - A Learning Environment is an area under the control of the learner, which was designed according to and adapted to his learning needs to facilitate the development of knowledge and his ability to share it. In the context of this Dissertation learning environments such as the child's school, home and riding arena were units of analysis (Creemers and Reezigt, 1999 in Freiberg, 1999).

Lunge – The horse is at the end of a long line. That gives the therapist/horseback riding practitioner, who is holding the line and stands in the middle of the arena

control over the horse's movements, its rhythm and tempo. Lunging requires effective communication with the horse, coordination, planning and skills.

Reinforcement - Reinforcement is an event that when paired with a behaviour will increase the chance that that behaviour will occur again (Chance, 2003).

Reinforcing Agent - A reinforcing agent is a dispenser of reinforcements. He does so in order to create positive control over a behaviour that is being shaped or maintained. Should a reinforcing agent use punishment in order to create aversive control over a behaviour he will loose his status as a reinforcing agent (Chance, 2003).

Self-Esteem – An individual's perception of social and personal worth. Self-esteem is affected by what people of higher authority expect of the individual, and on accumulating successes. (Crocker and Park, 2004; Dijksterhuis, 2004)

Slalom – Riding in and out of a line of obstacles (like cones on the ground).

Skill – Proficiency, facility, or dexterity that is acquired or developed through training or experience.

Sport Horseback Riding - The child learns to ride on a horse, to control the horse and to take care of it. The child is physically active and acquires horseback riding skills in accordance to standards set by the ministry of sport in Israel.

THR - Therapeutic Horseback Riding - Also known as **Therapeutic Horseback Riding, Equine Assisted Therapy, Equine Assisted activities, Equine Facilitated Therapy, Equine therapy, Hippotherapy,** and **Riding for the disabled,** is the use of the horse in equine-assisted activities to achieve a variety of therapeutic goals, including cognitive, physical, emotional and behavioural goals (STRIDES, 2011).

THRP – Therapeutic Horseback Riding Practitioner.

THRPs – Therapeutic Horseback Riding Practitioners.

Transfer of skills - Education is about building knowledge and mastering skills. The application of knowledge and skills taught through training in one context to contexts other than those in which the knowledge and skill repertoire was initially constructed is among the most important goals in therapy (Green, 2003; Yalom,

2002) and education (Halpern, 1998). The ability of clients to transfer newly built knowledge and acquired skills between learning environments and the ability of THRPs to facilitate this transfer process are seen as measures of therapeutic horseback riding effectiveness (Green, 2003; Yalom, 2002).

Transformational experience - A learning experience that affects the learner's strategy of building knowledge and skills is a transformational experience. According to Swinney (1989), transfer is the link between performance in the primary learning environment and something that is supposed to happen in the real world. Learners who are seen to transfer knowledge and skills between learning environments are perceived as changed or 'transformed' as a result of undertaking a new learning strategy (Holton, Bates and Ruona, 2000; Taylor, 2000).

Therapeutic Riding Practitioner - is a certified instructor that teaches horseback riding that has therapeutic outcomes.

NARHA – the **North American Riding for the Handicapped Association** - Was formed in 1969 as a nonprofit organisation "to promote equine-assisted activities and therapies (EAAT) for individuals with special needs. With over 3,500 certified instructors and 800 member center around the globe." (PATH Intl. Website).

PHTH Intl. – During the year 2012, NARHA has changed its name to PATH Intl. – the Professional Association of Therapeutic Horsemanship International. The association tagline is "Ensuring excellence and changing lives through equine-assisted activities and therapies" (PATH website). PATH association believes that "this name change will open doors to a myriad of inclusive possibilities and matches the growth of the equine-assisted activities and therapies (EAAT) industry. PATH Intl. vows to continue to provide its membership with an ever-evolving and progressive level of quality. The association promises that the service members receive will be positive, knowledgeable and friendly. The educational opportunities offered will continue to challenge and enlighten" (PATH Intl. website).

Round Pen – A round enclosure, with a diameter of about 18m, used for the training of horses and for horseback riding lessons that require control over the horse.

Unit of Work - Each THR session is an experiment with a beginning, middle, and end. The structure of an experiment is used as a tool to organise interventions by providing an orienting structure to support the learning and development processes the rider is experiencing. This structure is known as a Unit of Work. Carter (2000) has defined ’work’ as processes of change or development, either naturally arrived at or deliberately orchestrated. “A finished 'unit of work' is a coherent, assimilable experience; it may be the completion of a task, the resolution of an issue, or a learning experience." (Carter, 2000, p. 99). Applying this definition, a Unit of Work is a procedural frame of reference that helps to organise intervention change activity. It consists of four steps: (1) assessing ‘what is’ by heightening awareness of what appears to be happening; (2) choosing what to attend to by defining patterns or themes that exist; (3) acting on that choice by creating awareness of the pattern, suggesting an experiment that tests alternative ways of doing things; and (4) closing out that particular activity by acknowledging the new ‘what is’ that has evolved from the experiment.

Vaulting - A type of structured dancing or gymnastics on a horse (Fine, 2010).

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Chapter 1

Introduction

1. Introduction

This study investigated learning processes facilitated by Therapeutic Horseback Riding (THR), a type of Equine Assisted Therapy (STRIDES, 2011), and ways to maintain learning strategies and skills (Perkins and Salomon, 1992), acquired during therapy and transfer these strategies and skills to other learning environments, such as family and schools. In order to facilitate the transfer of these newly acquired learning skills and strategies to the family and school environments the Knowing Therapeutic Riding Model (the KTR model) was used. The KTR model (Kreindler and Kreindler, 2012) amplifies the valence of skills and strategies required to successfully meet the challenges of children diagnosed with ADHD. In addition, the KTR model explored the process of transferring skills learned on the riding field to other learning environments by fine-tuning the support these skills receive in school- and family-learning environments. The role of the THR practitioner (THRP) working according to the KTR model is that of a therapeutic case manager and the practice itself is no longer limited to the riding arena, but increases and reaches out to other learning environments were the efficacy of learning skills and strategies of the client are being challenged.

Therapies in general are judged to be effective when the gains clients make in therapy are successfully transferred to the world outside the therapy setting and the client is able to function properly by applying the skills and strategies learned in therapy in the outside world (Green, 2003; Holzman, 1978; Yalom, 2002). Therapeutic Horseback Riding (THR) faces similar criteria when being evaluated for effectiveness. In addition, the research explored ways to amplify (Boston, 2000) levels of skill acquired during THR by fine-tuning the support these new skills received in the school and family learning environments.

The purpose of this study was to create new knowledge in the field of THR, improve established THR practice and offer this knowledge to other professionals and stakeholders in order to help children, challenged by the Attention Deficit with Hyperactivity Disorder (ADHD), to develop according to their genetic development map and to actualise their potential (Banks, 2009, Donnelly et al., 1998, Erikson, 1968; Friedman, 2000; O'Connor and Yballe, 2007; Rogers, 1951,1980).

Therapeutic Horseback Riding (THR) has become very popular in Israel during the last decade. Parents who are seeking help for their children with ADHD choose, in many cases, to take their children to THR following the recommendations of their doctor or therapist. Children consider THR a fun activity and thus are more willing to co-operate with this form of therapy than with more traditional forms of therapy available to them. Major medical health insurers in Israel cover the cost of THR, partially or in full, thus, making it more attractive and available to parents of children challenged with ADHD (The Israeli Equestrian Federation, 2011).

The research questions were:

1. How do parents of children challenged by ADHD perceive the practice of horseback riding therapy?

2. How do Therapeutic Horseback Riding Practitioners (THRPs) perceive horseback riding therapy?

3. How can the THR practitioner facilitate the learning of new skills the client needs in order to cope more effectively with his/her therapeutic objectives?
4. How can THR practitioners facilitate the transfer of learning skills acquired during clients' participation in the THR programme to other learning environments?
5. What can THR practitioners do to amplify learning?

The data relating to the first two questions (1 and 2) was collected during the pilot research that examined the existing practice of therapeutic horseback riding, in Israel. Data for questions 3, 4 and 5, was collected during the field research.

The research focused on cases of nine to twelve-year-old children diagnosed and challenged by ADHD, their families, the horseback riding practitioners and the teaching staff in school. I believed that once I find the answer to my research questions and translate these answers into principles of THR, the results of the study will guide educators, parents, children challenged by ADHD and therapists towards a path leading to a substantial improvement in the quality of their personal and professional life.

The scope of this study was limited to Israeli children challenged by ADHD, living in the north of the country, and their families, who have chosen Therapeutic Horseback Riding as a preferred therapeutic strategy in order to facilitate the child's development.

My overall aim was to create, implement and evaluate the Knowing Therapeutic Riding model (KTR model) that would inform learning partnerships between school (teachers), therapist, child and family and improve the lives of children challenged by ADHD. The KTR model and the ensuing manual for the implementation of the KTR model, would guide parents, teachers, and THR practitioners on how to support most effectively processes that facilitate and serve to amplify the results of the therapeutic-learning process and produce higher quality learning outcomes in all three environments (the horse farm, the home and the school). Such a partnership would not only reap the benefits of therapeutic horseback riding, but also learn to support it at the family and classroom levels, and thus contribute to its effectiveness. The manual was further tested and refined, following the evaluation of its application.

1.1 The objectives of this thesis were:

The following research objectives were derived from the research questions:

* To understand what process or processes develop during the interaction between child and THRP within the framework of THR that bring(s) about a change in the child;
* To build a therapeutic bridge that would facilitate the transfer of the learning outcomes and strategies achieved during THR, on the riding arena, into the family environment, and into the classroom;
* To find out what I can do to leverage learning gains achieved in the riding arena, amplify them and harness them to the self-actualisation process driving the young learner;
* To improve the quality of life of children challenged with ADHD;
* To make a difference in the world of Equine Assisted Therapy by publishing my new manual;

* To start a dialogue with professionals in the field of Equine Assisted Therapy in Israel and around the world;

The research questions and the research objectives guided me throughout my research. I expect that both worlds, the professional and the academic, will be affected by the research. I further expect that my practice as well as the practice of other THR practitioners, here in Israel and overseas will be informed by the research findings.

1.2 My practice and justification for my thesis:

I am a certified family therapist. In my practice I meet families challenged by the learning disabilities and emotional difficulties of one or more of their children. These difficulties disturb or distort the family system's balance to the point where the need for therapy arises. Some of the families of children with learning disabilities who sought family and individual therapy in my clinic also sought additional non-conventional alternative therapy, to meet some needs that could not be clearly articulated, and in some cases chose practitioners of animal-assisted therapy to meet those needs.

My love for horses, and the fact that I have been riding horses since I was a child, led me to become aware of the field of Equine Assisted Therapy in general (which involves a therapeutic intervention with a horse, but not necessarily riding the horse, EAGALA) and Therapeutic Horseback Riding (THR) in particular (which involves a therapeutic intervention with a horse while the client rides the horse), and the effect it has on people in general and in particular on children challenged by ADHD. When these children ride horses, I see that they are happier, more confident and more motivated to learn than when they are in the classroom or at home. They concentrate on their riding skills, and trust their relationship with the horse and the relationship with their therapeutic riding practitioner. I kept asking myself: What do the interactions and relationships with therapeutic horseback practitioners and horses hold that brings about this change in children? How might I develop a therapeutic intervention, which will act as a bridge to facilitate the transfer of the learning outcomes and strategies achieved in the arena, into the family environment, the therapeutic environment and into the classroom? And what could I do to

leverage gains on the riding field, amplify them, and harness them to the self-actualisation process driving the young learner?

I asked these questions within the framework of a pilot research, during which I interviewed parents of children who are engaged in THR. Parents reported that the child behaved differently when on the farm: after a few sessions on the horse, he was calmer, in control, able to concentrate and to keep his concentration during complex tasks he was asked to perform and felt good about himself, but once he was back at home or in school, these changes didn't carry over, and behaviour returned to its previous patterns. Research conducted elsewhere (Basile, 1997) also reported that there were no significant changes in the child's behaviour at home or in school following THR. This fact led me to believe that a link was missing between the THR experience and the world beyond the riding arena, a link that would facilitate the transfer and application of the learning skills and strategies acquired by the THR client during his/her therapeutic experience at home and in school.

In Israel THR has evolved from an alternative fun-filled activity for clients challenged by ADHD and other disabilities to a mainstream therapeutic intervention supported by the medical profession and by the major medical health insurance providers. Children consider the THR less threatening than other forms of therapy and are willing to co-operate with this form of therapy (the Israeli Equestrian Federation, 2011). The THR experience when managed according to an agreed upon therapeutic vision effectively addresses therapeutic objectives, thus meeting the criteria for effective therapy set by both clients and major medical insurance providers (Kreindler and Kreindler, 2012).

1.3 About the research:

The Dissertation asks qualitative questions, it is an action research with six stages, a field study requiring the in-depth investigation of processes and intensive contact with the study's participants. It is longitudinal and studies in depth a small number of cases and thus fits the framework for the applied naturalistic constructivist paradigm, which is the paradigm I chose for my research (Sabar Ben-Yehushua, 2001, Yin, 2009).

I began my study by conducting a survey of the research literature in the field of therapeutic riding. The literature survey is the "science of summing up" (Light and Pillemer, 1984) and placing building blocks in the foundation of evidence-based practice (Booth, 2001). In addition, I conducted a pilot research during which I interviewed professional Therapeutic Horseback Riding practitioners (THRPs) and parents of children diagnosed with ADHD and enrolled in THR. The literature review and the interviews with the professional THRPs helped focus my thesis' research questions and informed my decisions during the design stage of my WBP when the research procedure was chosen and research tools were built.

The research procedure called for the conduct of in-depth interviews within individual cases, within the framework of multiple case-study methodology, with children diagnosed with ADHD, parents, THRPs and teachers as participants. In addition, documents, such as research diaries, school reports and completed report forms, were examined and observations were conducted.

The literature review and the multiple case-study procedure provided insights and informed the formulation of field theories governing the practice of case management in ADHD cases, and focused them on the learning processes taking place in three parallel learning environments and on the means to be employed by the THR practitioners to support transfer and amplification of learning gains.

In the last stages of the research, THR procedures refined during the previous stage (the manual) - were applied in the field and results were analysed leading to the further refining of the THR procedures.

There were quite a few objectives to this research, and they were all of significant value to THR practitioners. For example, the first objective was to understand what it is in the interaction and the relationship with THRPs and horses that contributes to the clients' development during THR that brings about a change in their behaviour. Other objectives were to build a therapeutic bridge that would facilitate the transfer of the learning outcomes and strategies acquired in the riding field – the arena - into the family environment and into the classroom. Furthermore, to find out what I could do to leverage gains on the riding field, amplify them, and harness them to the self-actualisation process driving the young learner, in order to improve the quality of life of children challenged with ADHD in Israel and overseas.

I have started a dialogue with professionals in the field of Equine Assisted Therapy in Israel and around the world. I believe I have made a difference in the world of Equine Assisted Therapy, by publishing my new guidelines. Both worlds, the professional and the academic, were impacted by the research. My practice as well as the practice of other practitioners, here in Israel and overseas will be informed by the findings of my Dissertation.

For my study I reviewed literature dealing with: change through therapy, animal-assisted therapy, equine-assisted therapy in general and horseback riding therapy in particular. Furthermore, I reviewed research investigating the challenges ADHD poses for some learners and the facilitative programmes designed to offer equal opportunity to the ADHD-challenged learner in general, and how therapeutic horseback riding facilitates the learning processes children challenged with ADHD engage in, in particular. Finally, I explored the research literature on the topic of transfer and mainly the question of how the transfer of skills from one learning environment to another occurs.

My research was conducted in six stages. During stage one I conducted exploratory interviews, which showed a lack of concern by the therapeutic horseback riding instructor for the therapy objectives, and no curricular concerns for the facilitation of the transfer of skills acquired during THR.

I argue that as therapists we expect our clients to develop skills and strategies of meaning making in the therapeutic environment and the ability to transfer these newly learned skills outside the therapeutic environment. We can expect nothing less for our THR clients.

The results of the exploratory interviews were used in the design of a THR manual for THR practitioners working with clients challenged by ADHD, and helped to crystallise the KTR model.

During the fourth stage of the research, three clients willing to participate in the research received up to 30 therapeutic horseback riding sessions according to the manual. During these sessions the participants and I worked on the agreed upon

therapeutic goals and their ability to transfer newly learned skills and learning strategies, was facilitated. Data were collected and analysed regarding learning and developmental processes in which the client engaged during THR. The research findings were used to further refine the manual of THR practice.

During the last stage of the research a group of expert practitioners of THR and researchers in the field were asked to evaluate the manual and the research findings by comparing them with their own THR experiences and research and to validate the KTR model.

The findings showed that the THR experience addressed therapeutic objectives directly. The client learned relevant skills infused into the riding curriculum and the skills acquired during the THR sessions were successfully transferred with the help of reflection on practice and during practice. By eliciting associative reflection the THR practitioner can bridge between the riding arena and school experiences and/or home experiences.

The amplification effect occurs when a skill learned during therapy and transferred to another learning environment is supported by that environment and leads to successes. The skills most likely to be amplified are skills that are relevant to that learning environment. For example, if in the paddock the child learns how to organise himself with regard to the equipment he must bring to the riding session, with regard to time management, with regard to the concentration he needs in order to perform his tasks while on the horse and with regard to the stimuli he needs to pay attention to and those he must disregard in order to be successful, the child may transfer these skills to the classroom or to the home environment. If teachers and parents learn how to recognise the transfer and how to celebrate it, the child will understand that these skills are relevant to successful functioning in those environments and the use of these skills will be more frequent and become dominant. The THR practitioners will note the rapid learning curve and know that the skills learned are taking hold in the child's repertoire. If, however, the learning curve remains slow and shows regression effects from time to time the THR practitioner will know that the skill is not growing in strength and will need to adjust his practice.

Chapter 2

Literature Review

The Literature Review:

2.0 Introduction:

This thesis is about the Change processes clients experienced when engaging with therapeutic horseback riding conducted by me as the therapist. The clients were children challenged by ADHD. The Literature Review examined eight research fields relating to therapy and change. First I presented the Therapeutic Stream, which my therapeutic approach derives from and next I reviewed the literature dealing with Change and how people change through therapy in general. The chapter concludes with a review of the research literature discussing Animal Assisted Therapy, ADHD, Therapeutic Horseback Riding in general and Therapeutic Horseback Riding for children challenged by ADHD in particular, Transfer and Amplification and Ethics Considerations were also reviewed.

2.1 Therapeutic Stream

As a therapist my therapeutic approach derives from the humanistic psychology stream. The humanistic psychology stream, unlike its predecessors, the Analytic-Dynamic and Behavioural-Cognitive streams of therapy, recognises the full richness of the human experience and celebrates it. Until World War Two, the psychoanalytic-dynamic approach and the behavioural-cognitive approach were the dominant approaches in psychology. This is the reason why humanistic psychology was referred to by Maslow (1967) as the 'third force' in psychology. The first and second forces were psychoanalysis and behaviourism in that order. The Psychoanalytic approach perceived the person as driven and controlled by unconscious motivations. It is a deterministic and a pessimistic approach (McLeod, 2003). The behavioural-cognitive approach perceived the person's behaviour being shaped by the child's learning environment. The behaviourist-cognitive therapist is looking for shaping processes that produced the behaviour and works at re-engineering the learning environments (Beck and Freeman, 1990). These two approaches to psychotherapy are both deterministic and pessimistic (Rogers, 1980). Freud, for example held that the way people behave in the present time is determined by their past experiences from early childhood (Freud, 1964). The

behaviourist-cognitive approach argues that the reinforcement of behaviour in early childhood – both good and bad behaviour - determines the behavioural characteristics of the individual in the future (Skinner, 2011). Both of these approaches seem to consider that free will and a free choice do not exist in a person's life. The horrifying experience of World War Two had a significant influence on the western world's way of thinking in general, and on psychology in particular. In Europe the existential philosophy was flourishing. It emphasised the danger faced by individuals living under the rule of a totalitarian government and how such governments rob the individual of his unique personality. Following the war, the Existentialism in Europe and the Humanistic Psychology in the United States were founded, focusing on each individual's potential, stressing the importance of development, growth and self-actualisation. The humanistic theoreticians (Maslow, 1967; Rogers, 1980; Rotter, 1954) argued that people are born with forces that are innately good. The individual's personality was seen by the founding fathers of Humanistic Psychology, as being driven by the wish to reach fulfillment and self-actualisation.

Rogers (1980) and Maslow (1967) were considered to be the founders of Humanistic Psychology. Both practiced psychotherapy. Maslow (1998), who spent most of his time in the academic world, was engaged in research. He argued that the main principle of the Humanistic Psychology is the belief in the individual's drive for self-actualisation as the main force in the shaping of the human personality. People are born with needs and tendencies and the main need in every one is to fulfill his potential. In addition, this approach believes that human nature is good and healthy. People are driven to form positive interpersonal relationships. The cause for pathology, according to the humanistic approach, is the social environment that can prevent the person from self-actualising and from satisfying his needs, thus causing deviations from the person's natural tendency. This blockage and distortion occurs for instance when a child gets the message from his parents that he is loved and valued by them only if he behaves in certain ways and not others. This is the root for mental and social problems (Rogers, 1980, Bitman, et al., 1992). On the other hand, a supportive environment, positive relationships, acceptance and love, contribute to mental health and to a healthy personality, which can in turn direct itself toward self-actualisation (Rogers, 1980).

Rogers coined the phrase 'Person centered psychotherapy', which is the essence of his approach to therapy. According to Rogers (1980), the therapist facilitates his client's efforts to reach self-actualisation. The therapist does not tell the client what to do, but lets the client lead the therapy in a way that will enable him to look at his life and find his own way to self-actualisation. There is a significant value to the relationship between the therapist and the client. The therapist is empathic and accepts the client's feelings with no judgment, no matter what they are. Thus, a supportive environment is built, which enables the client to accept himself and his needs and to examine feelings that he avoided looking at before coming to therapy, and to develop his capabilities for self-actualisation (Bitman et al., 1992). Humanistic psychology has a holistic view of the individual. It takes into consideration the environment in which the person lives, learns and grows. In addition it holds that person's life should be guided by his own subjective reality and facilitates the client's assessment of his experience.

2.1.1. The Strengths of Humanistic Psychology:

Humanistic psychology emphasises the positive forces in the individual, which can enable him, under the right circumstances, to control and determine his life, his mental health and reach his full potential. Its focus is on human capabilities for growth and the inquiry into how choices are made.

Humanistic Psychology is optimistic and is focused on the here and now (Perls, 1978), facilitating the full exploration of the environment. Non-judgmental, acceptance, empathy and support, are the main tools of the therapist. The client is expected to be able to recognise his strengths, amplify them and use them to reach his full potential (Maslow, 1998).

Humanistic Psychology takes into account environmental influences, and does not focus only on the individual's internal thoughts and desires. Humanistic Psychology had a great influence on therapy, healthcare, education and research. Since the focus of Humanistic Psychology is on the individual's experience, it leads to the adoption of the qualitative approach to research. Not that it is opposed to quantitative methods, but it saw them as mainly appropriate when something can be counted or measured against a standard. Qualitative methods, on the other hand, produced and amplified the inner voice of the individual (Giorgi, 2005a). Humanistic Psychology

made therapy suitable for all people and not just for people with a personality disorder or for those diagnosed as mentally ill, by removing the stigma, which was attached to therapy. Therapy became more acceptable for normal, healthy individuals, who were seeking to explore their capabilities and abilities and reach self-actualisation through therapy (Bitman et al., 1992; Rogers, 1980, 1967, 1951).

Humanistic Psychology sees and addresses the healthy parts in the individual in contrast to the analytic-dynamic psychology that adopted the medical model's suggestion that pathologies that need to be cured be addressed (Giorgi, 2005a).

Humanistic Psychology was the fertile ground in which other approaches to humanistic counseling developed, among them Gestalt Therapy and System Therapy, and, marital and family therapy, both of which I am practicing for close to two decades (Perls, 1978; Satir et al., 1991).

According to Cain (2003) some of the weaknesses of Humanistic Psychology are that it is neither scientific, nor can assumptions made by humanistic psychologists be measured. Cain (2003) also stated that Humanistic Psychology is basically common sense and lacks academic research and professional publication. For Cain Humanistic Psychology is vague and subjective. An experience that is authentic for one person is not necessarily real or authentic for another. Thus, it is difficult to objectify human experiences and prove Humanistic Psychology reliable.

Elkins (2009), on the other hand, maintains that assumptions are indeed measurable and points to the use of qualitative research.

> *It is easy to forget that human beings choose their epistemological perspectives, which are not themselves scientifically verifiable* (Elkins, 2009, p. 106)

Giorgi also supports Elkins and shows Humanistic Psychology to be effective in the way people experience their change processes. Giorgi states:

> *...psychology is a unique discipline that requires its own kind of science – what he has termed "Human Science" (Giorgi in Elkins, 2009, p.16).*

I believe Humanistic Psychology to be particularly useful for the interpretation of the change processes children experience when engaged in therapeutic horseback riding. Therapeutic horseback riding aids children with ADHD challenges, in

teaching them how to discover their way to cope with these challenges, thereby enabling the children to manage their lives more effectively (Giorgi, 2005b).

2.2 Changes and How People Change Through therapy?

People that undergo therapy, all kinds of therapy, do so because they feel that they need a change (Carey et al., 2007). This is what they usually say during the first therapy session. They are usually unhappy with where they are at work, in their personal relationships or at school, and are looking for a way to make things better. As a family therapist, I ask myself what makes my client feel better following therapy. One of the goals of psychotherapy is a psychological change for the better, but what is that change and how does it happen (Carey et al., 2007)?

McLeod (2003) believed that the main problem of all patients who come to psychotherapy is demoralisation and that the effectiveness of all psychotherapeutic currents can be evaluated by their ability to restore the patients' morale (reduce or completely dissipate a patient's feelings of demoralisation, at work, in their family life or at school). Frank (1974 in McLeod, 2003) defined demoralisation as follows:

> *This state of mind, which may be termed 'demoralization', results from the persistent failure to cope with internally or externally induced stresses that the person and those close to him expect him to handle… feelings of impotence isolation and despair. The person's self-esteem is damaged, and he feels rejected by others because of his failure to meet their expectations* (McLeod, 2003 p. 56).

According to Frank and Frank (1991):

> *The aim of psychotherapy is to help people feel and function better by encouraging appropriate modifications in their assumptive worlds, thereby transforming the meaning of experiences to more favorable ones* (McLeod, 2003, p.30).

Parloff (1986) found that most people who seek psychotherapy are demoralised because they have a variety of symptomatic behaviours that stand out in contrast to normative behaviour. Parloff (1986) defined psychotherapy as follows:

> *Psychotherapy achieves its effects largely by directly treating demoralization and only indirectly treating overt symptoms of covert psychopathology* (Parloff, 1986, p.522).

In my own psychotherapy practice I focus on the need to 'restore the morale' (Frank, 1974) of children challenged by ADHD, which involves the recovery of self-esteem, as well as the developing of the skills with which to cope with internally or externally induced stresses.

I believe that before asking the question "what works in therapy?" there is a need to deal with the question - "does therapy work?" Reviews of psychotherapy outcome research document the empirical evidence supporting the effectiveness of psychotherapy (Asay and Lambert, 2000). These reviews include a large amount of data collected by controlled studies on thousands of patients with a wide range of presenting problems, hundreds of therapists, and highly diverse therapeutic approaches. "These reviews leave little doubt - therapy is effective!" (Asay and Lambert, 2000. p. 24). The data showed that a sample of treated patients belonging to the experimental group fared much better than the untreated patients that belonged to the control group sample (Asay and Lambert, 2000). A meta-analysis showed that 75% of clients participating in a weekly psychotherapy session, improved significantly after 6 months or 26 sessions of therapy. More than that, approximately 50% of clients showed a clinically significant change after only 8 to 10 sessions (Howard, Kopta, Krause and Orlinsky, 1986; Kadera, Lambert and Andrews, 1996). Assay and Lambert (2000) also found that:

> *...psychotherapy has lasting effects and that most clients can be expected to maintain their gains over time* (Asay and Lambert, 2000, P. 27).

It is important to enhance the maintenance of treatment effect by emphasising this goal in the final therapy sessions. Research findings show that clients, who believe that changes occur due to their own effort, are more likely to experience a long lasting change (Lambert and Bergin, 1994) following therapy. In short, empirical evidence supports the conclusion that psychotherapy is *"effective, efficient and lasting"* (Asay and Lambert, 2000, p. 28).

The question ‘how do people change’ or ‘what works in psychotherapy that leads people to change’ is not at all new (Hubble, Duncan and Miller, 2000; Paul, 1967).

My own twenty-year experience as a therapist and the accumulating weight of empirical evidence from research, have shown that, in most cases, therapy works. Therapy works when the client reports that he has acquired in therapy a set of skills and strategies that help him or her return to the path of personal and professional growth and development. We can go back now and formulate an answer to the question 'what works in therapy' (Ducan and Miller, 1999)?

Gordon (1999) expanded this question by adding: 'by what process?' (Gordon, 1999), stating that the process is the most important and critical component to his question and that we aught to sort out the process by which different therapies affect different clients. So, what works in therapy?

According to the principles of Humanistic Psychology, there are six conditions which are necessary, in order to produce changes in clients. The **Therapist-client relationship** is one of the core concepts of Rogers' (1951) Humanistic Psychology. The client who comes to therapy needs to feel accepted, supported and appreciated by the therapist. Only in a non-judgmental environment can a client develop and grow and reach self-actualisation. The humanistic approach, believes in the clients' potential and ability to make the right decision and choices for his or her life.

The client's vulnerability to anxiety is the product of the incongruence between the ways the client sees reality and the way those surrounding him do. A client is in a state of incongruence, is vulnerable and anxious because of a perceived lack of stability and constancy in the way he constructs representations of his experiences. **The therapist genuineness** is a very important component of the client therapist relationship. When the client – therapist relationship is perceived as being genuine, congruent or integrated it can support processes of growth and development. **The therapist's unconditional positive regard** (UPR) characterises a therapeutic environment when the therapist accepts the client as he is, with his feeling and thoughts, with empathy and without judgment. Haugh and Merry, (2006 p. ii) explain the dynamic as follows "The therapist is experiencing unconditional positive regard toward the client". **The therapist empathic understanding** of the client's world facilitates the onset of a healing dialogue between the therapist and his client. True and accurate empathy signals the client that the therapist has accepted his world and has unconditional love for him. **The client's perception** of

the therapist's unconditional positive regard (UPR) and the therapist's empathic understanding are important elements of an effective psychotherapeutic relationship (Haugh and Merry, 2006; Rogers, 1957). The client's perception may be handicapped by past experiences or by communication difficulties during therapy.

Asay and Lambert (2000) and Carey et al. (2007) found similar contributing conditions that work during effective successful therapy. **Client factors** are considered to be major contributors to the effectiveness of therapy. Factor analyses conducted on the data Carey et al (2007) collected have consistently shown that this category explains effectiveness of therapy at 40%. Client factors are responsible for the therapy's success or failure. Client factors are extra-therapeutic factors. Such factors are: 'what the client brings to the therapy room' (Carey et al., 2007), his or her history and extra-therapeutic events that influence the clients' life out-side the therapy room. Some of these extra-therapeutic events are the client's personality, his ego strength, the level of social and family support the client receives, beliefs and spiritual hope, and belonging, being part of a community (Bergin and Lambert, 1978; Garfield, 1994; Lambert 1992; Lambert and Anderson 1996; Lambert and Asay 1984; Strupp 1980).

The therapeutic relationship is another significant category of factors contributing to the effectiveness of therapy. Researchers report that the contribution of this cluster of factors to the explanation of the effectiveness of therapy is at the 30% level. This category includes the following factors: the therapist's warmth, love, caring, empathy, acceptance, his or her ability to be nonjudgmental and to encourage risk taking (Lambert, 1992).

Client expectancy is a category of factors that included placebo effects and also the client expectations to better his or her life. The client expectancy factors were responsible for the explanation of 15% of the effectiveness of therapy. Typically some clients come to therapy with an optimistic outlook on life, are hopeful that the therapy will succeed and have a plan for the future (Lambert, 1992).

Therapeutic technique and the Therapy Model that the therapist uses have been grouped together as a category of factors that explain 15% of the effectiveness of therapy. Some of those factors are unique to a specific therapy stream such as the psychoanalytic approach, the behavioural-cognitive approach or the humanistic

approach. They can be certain therapeutic techniques such as biofeedback, hypnosis, or systematic desensitisation. Other factors might be common to several therapeutic streams such as the hour-long session, the use of supervision and the constancy of the clinical setting (Asay and Lambert, 2000).

According to Carey et al.'s (2007) research, the clients' descriptions of how change occurred through therapy fell into six themes: 'Motivation and readiness' – when the client is eager and desperate to get back to his old self. 'Tools and strategies' – when the client used the tools and strategies learned in the therapeutic setting to make changes in his behaviour. A third theme was 'Learning' – when the client reported that he took material home to study and try out. 'Interaction with therapist' was another theme that contributed to change processes in therapy. When interacting with the therapist, the client reported that the therapist was non-judgmental and did not think that "he knows you". A fifth theme was 'Perceived aspects of self' which refers to the therapist's ability to learn from client reports about how they see themselves. The sixth, and last theme was 'The relief of talking'. The client reported they felt better and clearer after 'taking everything out' while talking with the therapist.

Bandura (1988) also stressed the fact that when a person believes that he can achieve what he wants, he will have a healthier and more effective life. Bandura used the term 'self-efficacy' to describe this state, which refers to the person's perception of himself in regard to his ability to perform certain tasks. Bandura (1988) found out through his research that people, who believe in their ability to perform the tasks and to achieve their goals, will be active towards the tasks they are assigned or which they assume, and will desire to achieve defined goals. Thus, a person with a high level of self-efficacy will invest the necessary effort in order to achieve his goals. A person with low self-efficacy will fail to effectively engage with his tasks or draft the necessary amount of energy and motivation to complete successfully the task and attain his goals.

Marks (2002) proposed that 'self efficacy' when reported or re-activated in a client's view of himself, would go a long way in predicting change for the better in therapy.

> *Self efficacy is today a basic construct in any theory of behaviour change. It is an individualistic concept focused on the individual's agency, mastery and sense of control. It is also a very useful and powerful construct because it is a strong predictor of behaviour change* (Marks, 2002, p. 90).

Yalom (2002) distinguished between two kinds of behavioural changes: the one that takes place in the therapy situation and the one that takes place outside the therapy setting, in the outer world. Yalom (2002) states that behavioural change in the therapy situation is not enough:

> *...patient must **transfer** their change into their life environment. In the last stages of therapy I am energetic in ensuring transfer of learning. If I deem it necessary, I begin to coach actively, to press the patient to experiment with new behaviours in work, social and family settings* (Yalom, 2002, P. 183).

According to the 'Gestalt theory of change' (Perls, 1978), change takes place when a person becomes what he is, and not when he tries to be or to become what he is not. Thus the role of the therapist is to encourage the client to stay where he is and deepen his awareness about who he is, and to abandon what he would like to become. Only after a person accepts himself the way he is, can he move on, on his own path of growth and development

This thesis is about growth and development processes taking place in children challenged by ADHD through therapeutic horseback riding. Therapeutic Horseback Riding (THR) is a type of Animal Assisted Therapy.

2.3 Animal Assisted Therapy:

Man's relationship with the animal world has been a complex relationship oscillating between extreme polarities such as love and violence. Man has destroyed the habitats of some animals and created natural reserves for other animals. Man has caused the extinction of some species and at the same time created new ones. This relationship has found its expression in the arts and in therapy (Fine, 2010). Frued's (1964) psychoanalytic approach relates to the animal as a symbol of man's primitive parts, the Id, which contains the basic drives, symbolically called – "the animal

drives". In Jungian (Jung, 1963) terms, animals are a wild component in man's personality. Animals have been used to improve the quality of life of people, both emotionally and functionally since the time of the ancient Greeks (Macauley, 2006).

The famous nurse Florence Nightingale (1860) first recorded the use of animals in health care in 1860. For her, nursing was:

> *The act of utilizing the environment of the patient to assist him in his recovery…A small pet is often an excellent companion for the sick, for long chronic cases especially* (Nightingale, 1860, p.13).

The positive effect of the relationship between patient and animal has been recognised as far back as the middle of the 18th century with the planned introduction of pets into the care of people with mental illnesses at "The York Retreat" in England (Levinson, 1997). Levinson (1978), a psychotherapist, whose practice focused on children, is considered to be the one who first started using animals in his therapeutic interventions and was the first to build a professional framework in this field (Kruger, Trachtenberg and Serpell, 2004).

Levinson (1978) argued that personality development could be affected for the best by encouraging the development of close relationships between his clients and pet animals, especially during childhood and old age. The development of empathy, self-esteem, self-control and autonomy, have shown significant increases in clients who raise animals. Furthermore, the feelings of loneliness and depression are reported to decrease in people when animals are around (Levinson, 1978). According to Levinson (1978), the development of personality among people who live close to animals would be different from the development of personality among people who do not live in an environment in which there are animals. Levinson (1978) was one of the first to claim that emotionally disturbed children, who experienced difficulties in their relationship with people, can relate more easily or quickly to animals. Levinson justified his statement suggesting that the:

> *...primary reason was the animals' ability to offer the child non-threatening, non-judgmental and essentially unconditional attention and affection* (Levinson in Bokkers, 2006. p. 32).

A growing body of research supports Levinson's (1978) arguments on the powerful relationship between humans and animals. Children and adults report a sense of

security and unconditional love, as a result of their bonding with an animal (Risley-Curties, et al., 2006). The relationship with companion animals was found to contribute to a child's cognitive and language development (Melson, 2001), and to an elderly person's ability to carry out daily activities (Raina, Waltner-Toews, Bonnett, Woodward and Abemathy, 1999).

May-Ron (2005), an Israeli psychologist who works with pets in therapy sessions, writes about the emotional connection between the client and his pet. May-Ron (2005) states that the contribution such a relationship makes to the development and growth of her clients has several noteworthy characteristics: social support, role substitution and attachment. The pet's character fully accepts each person regardless of his condition or disability. May-Ron (2005) states that the person uses a pet first of all as a projection object and also as displacement for his needs (needs not satisfied by a parent, for example, are expected to be satisfied by the animal). May-Ron (2005) describes the way a person uses these kinds of mechanisms and states that in order to use them, there has to be a form of attachment between the person and the pet. The term attachment refers to a close relationship between the client and his parents, which is based on feelings of safety and confidence (Bowlby, 1969). Secure attachment between the baby and its caregiver is necessary for optimal psychosocial development and vice versa (Ainsworth, 1989; Bowlby, 1969). Some pathological behaviours in adolescence and in adulthood are thought to be related to the quality of the early attachment experience (Bowlby, 1969). In addition, May-Ron (2005) states that the fact that there is no real verbal communication between the person and the pet has many benefits. The person projects on the animal his ideas and the way he sees things and the animal cannot deny, confirm or reject these ideas. May-Ron (2005) argued that criticism or judgment, which are common characteristics of human relationships, cannot be found in the human-animal relationships (May-Ron, 2005).

May-Ron (2005) summarised the benefits a person may derive from his relationship with a pet according to the order of their reported significance: love and liking, pleasure, a feeling of trust and security that the pet 'gives', and the enjoyment derived from the pet's beauty. This article is quite a recent publication and was addressed mainly to the academic world. There were a few points in the article that had an impact on my thinking. May-Ron (2005) postulated the development of a

system of non-verbal communication between humans and horses and highlighted the fact that the horse accepts the person and is not critical or judgmental during their encounter. I argue that the mere act of being on a horse with the atmosphere/ambiance that are part of the experience and the support of the THRP, bring to mind the comparison between THR and psychotherapy. When both THRPs and clinical therapists accept the client without criticism and judgment, and the atmosphere in the therapeutic room and in the THR arena are characterised by love and trust, the processes of learning and change can be activated.

Also Crawford and Pomerinke (2003) brought to light first hand praxis related evidence from the field of Animal Assisted Therapy (AAT). This supports experiential data on the success animal assisted therapy has in helping and enhancing the lives of children and adults with serious problems. Hospitals rehabilitation programmes, physical and occupational therapy sessions, nursing homes, mental healthcare facilities, and hospice programmes, are only some of the settings where dogs, cats, horses, and other animals have helped patients cope with often daunting medical and psychological challenges.

Crawford and Pomerinke (2003) reported many compelling cases evidencing the healing animal-human partnership, including that of six-year-old Brendan, who, disabled from birth, successfully completed his physical therapy with the help of Zorro, a big black hound once considered unadoptable. Other cases in point were: Tikva, a Keeshond therapy dog from Oregon that helped to comfort emotionally drained firefighters and other rescue workers at New York City's Ground Zero; and, Amy, diagnosed with hyaline membrane disease, which progressed to bronchia-pulmonary dysphasia and asthma, who, thanks to a horse named Raffles, eventually improved her muscle tone to the point that she could dress herself (tie her own shoes), learned dressage (horse training), went on a trail riding excursion in Colorado and competed successfully in a Dressage Competition and took first place. Crawford and Pomerinke (2003) emphasised the belief that whenever healing is desired by the client, even when the situation seems hopeless, Animal Assisted Therapy would advance human health and happiness. The data presented by Crawford and Pomerinke (2003) in the form of short narratives is experiential and anecdotal and not empirical.

Fine (2010) provided a broad overview of AAT's theoretical and practice considerations and noted that working with horses requires a specialised setting and is more risky, but horses also offer "…a peak experience, perhaps unmatched by any other animals" (Hart, 2000, p.94).

2.4 Attention Deficit Hyperactive Disorder – ADHD

Children diagnosed with ADHD are classified as being challenged by learning disabilities (DSM IV, 2000). The most common definition in the educational system in Israel for "learning disability" can be found in the Director General's Monthly Directives, a monthly publication widely disseminated throughout the education system in Israel. The December issue of 2003 states that in order to declare a student to be 'challenged by a learning disability' he must meet the following two criteria:

a. There is a continuing significant gap between the student's achievements and those expected from students of his age, and age cohort.

b. There is a significant gap between the student's learning achievement and his cognitive and intellectual abilities (skills) as measured in objective tests.

According to the NJCLD (1994) organisation (National Joint Committee of Learning Disabilities), 'Learning Disability' is a generic name for a heterogenic group of disorders which manifest in significant difficulties in acquiring or in using skills such as listening, speech, reading, writing, logical thinking, mathematical skills or social skills. These disorders are internal (organic) to the individual and derive from a dysfunction in the nervous system (NJCLD, 1994).

The DSM-IV (2000), The American Psychiatric Diagnostic and Statistical Manual of Mental Disorders, adds to the definition of Learning Disability the following parameters: demoralisation, low self-esteem and difficulties with acquisition of social skills that can be related to the learning disability.

The DSM-5, published on May 18th 2013, is the fifth and the latest edition to the American Psychiatric Diagnostic and Statistical Manual of Mental Disorders. The diagnostic criteria for attention-deficit/hyperactivity disorder (ADHD) in DSM-5 further reinforces the diagnostic criteria of the DSM-IV.

2.4.1 Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder (DSM 4th ed., 1994):

The main symptoms of children with ADHD fall into three groups:

- Lack of attention.
- Hyperactivity
- Impulsive behaviour (impulsivity).

(For a full version of the diagnostic criteria see Appendix 00A, p. 269).

Lack of attention*:* often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities. Often has difficulty sustaining attention levels required of him during tasks or play activities. Often does not seem to listen when spoken to directly. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace. Often has difficulty organising tasks and activities. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework). Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools). Is often easily distracted by extraneous stimuli. Is often forgetful during daily activities

Hyperactivity-impulsivity: **Hyperactivity:** Often fidgets with hands or feet or squirms in seat. Often leaves seat in classroom or in other situations in which remaining seated is expected. Often runs about or climbs excessively in situations in which it is inappropriate. Often has difficulty playing or engaging in leisure activities quietly. Is often "on the go" or often acts as if "driven by a motor". Often talks excessively

Impulsivity: Often blurts out answers before questions have been completed. Often has difficulty waiting his turn. Often interrupts or intrudes on others.

It is important to note that most children (or adults) that are challenged by ADHD are in most cases children with normal or high IQ levels (Greenspan and Greenspan, 2009, Barkley, 2009b). Still these children find themselves experiencing difficulty

with learning skills such as language and thinking skills, perception, orientation in space and time, memory, attention and focus, motor skills, perception-movement coordination and organisation. These difficulties affect a large range of functions and can be observed at different levels of severity (Brown, 2013).

In the past, disability referred to an illness, either physical or mental. In the last decades the term disability was reevaluated and reconsidered. Today the concept of disability has been reexamined by the two dominant yet different schools of thought: the medical and the humanistic models (Wampold, 2010). The medical model, views disability as an illness caused by a physical or organic condition which causes a reduction in the quality of life of the individual with the disability. The medical model seeks to "cure" the illness or ameliorate the symptoms and offers medical solutions, such as medication and/or clinical psychotherapy and/or clinical physical therapy in order to "normalise" the disability and allow the disabled person to be part of society as much as possible (Vehmas and Taylor, 2004).

The humanistic model, on the other hand focuses on the abilities of the child diagnosed with ADHD. It facilitates their development, it amplifies them and prescribes the celebration of their expression. The humanistic model believes in the ability of the child diagnosed with ADHD to find the most creative and adaptive solution to the artificial problems that he encounters during his natural growth and development (Perls, 1978; Rogers, 1980).

The humanistic model "treats" abilities, skills and successes. It works on positive experiences and seeks to facilitate reflection and learning from them.

ADHD – Attention Deficit with Hyperactivity Disorder is among the learning disorders included in this definition. Two thirds of the children challenged with Attention Deficit Disorder are also hyperactive. Five percent of children in elementary school are challenged with ADHD and some researchers show even higher percentages. More boys than girls are diagnosed with ADHD, the ratio being 1:4 (Barkley, 2000).

It is important to note that during the diagnostic process of children suspected to be challenged by ADHD other potential challenges like PDD (Autism), schizophrenia,

or mood swings, anxiety disturbances, sleeping disorders, disassociation or personality disturbances, must be ruled out (Yishai-Karin, 2002).

Another factor that needs to be considered and ruled out during diagnosis is depression. Depression in children, in contrast to depression in adults, manifests itself in anger outbursts, agitation, body movement and lack of concentration. Children suffering from a condition known as hidden depression can be diagnosed as being challenged by Attention Deficit Hyperactive Disorder (ADHD) in error.

Most of the diagnosis is done when the child reaches elementary school, until then, it is difficult to determine if the child has ADHD. There are certain characteristics to a child with ADHD that trigger his referral to a diagnostic process. His note-books are usually empty or full of drawings, the child does not know what homework was given, doing homework is an unbearable task for him, and once he does sit to do his home-work he constantly gets up from his chair and loses concentration. The child will do other things while preparing his homework, like watching television or playing. The child is unable to show his abilities and to succeed and he is in a constant state of frustration. In addition this child will have difficulties standing in line or waiting for his turn, or in conducting a conversation with another person, he moves a lot and can distract other children and his movements make noise at inappropriate times. Very often, this child will be involved in accidents and will get hurt. He tends to act without planning his actions in advance and without considering the results of his actions. He does not stop to reflect about his actions and therefore does not learn from them. He has difficulties in understanding social codes and social interactions and will get in trouble, feel threatened and respond with violence. Because of poor preparation and training, teachers and parents tend to punish the impulsive and inattentive behaviour of children diagnosed with ADHD thus compounding the child's behavioural problems (Barkely, 2009b).

Teachers and parents will compare the child diagnosed with ADHD to other children just as the child will learn to compare himself to other children in his class and find himself in a lower position. A child with ADHD is at high risk of developing low self-esteem and adopting the tag of 'the bad child' in his eyes and in the eyes of everyone around him including his parents, siblings, relatives, friends and acquaintances. This child will barely have any friends and will experience great

difficulties in making friends. He will be treated as the class 'clown' and will be laughed at and rejected by his peer group (Barkely, 2009b; Greenspan and Greenspan, 2009; Yishai-Karin, 2002).

In addition to low self-esteem, violence and social problems, there are other problems that the child with ADHD faces (Barkley, 2009b). For example one such problem is a lack of motivation and a deficit in his ability to manage effectively motivational resources at his disposal. After several years in which the child tried very hard to succeed and ended up being left behind frustrated and negative, he gives up and does not want to engage again. The child feels that he cannot succeed, therefore he stops trying. Even after diagnosis and treatment, it is very hard to rehabilitate the child's self-image and to motivate him to try again and bring himself to succeed in school, with friends and at home. Further more, this child is likely to develop a negative attitude towards authority, due to the negative experiences he had. His low self-esteem, being impulsive and feeling an outsider, may cause such a child to join a disenfranchised group of youths and to engage in criminal activities aimed at the society and institution that marginalised him. Children with ADHD, which were not treated correctly, are at risk of dropping out of school and becoming criminals. Girls with ADHD that were not properly treated, during adolescence, might engage in premature and socially destructive sexual activities and will not have the skills to protect themselves from being used or attacked sexually (Barkely, 2009a, b; Greenspan and Greenspan, 2009).

In addition, addiction to drugs and alcohol among adolescences and adults is more common among those challenged with ADHD. As with other emotional problems, the use of drugs and alcohol is a way of self 'healing' for the person with ADHD that was not treated appropriately. Some of the adolescents are using coffee and Coca-Cola instead of Ritalin, a medicine given to children challenged by ADHD (Biederman et al., 1999).

This thesis focused on children who were diagnosed with ADHD, who turned to THR in order to improve their ability to cope with this challenge.

2.4.2 The Family of the Child Challenged by ADHD:

The child challenged by ADHD is not alone with his difficulties. His family is greatly affected by the challenges he faces that often develop into family problems (Johnston and Mash, 2001; Whalen and Henker, 1999). The child's restlessness, disorganisation, disruptiveness and impulsivity take their toll from the whole family, which is exposed, to stressors both internal and external which it is ill equipped to cope with (Anastopoulos et al., 1993; Harrison and Sofronoff, 2002; Solomon, Pistrang, and Barker 2001). The family's climate, coping mechanisms and wellbeing affect the development and growth of the child diagnosed with ADHD. Many mothers and fathers, who are trying to cope with their child's behaviour, realise that they have all or some of the same behaviour characteristics as their child. They are often impulsive, over active and have difficulties in keeping focus on one task for a long time. These parents experience great difficulties when attempting to mobilise their patience and empathy when reacting to a child diagnosed with ADHD due to their own attention deficits. A parent with ADHD may feel guilty and frustrated and may react angrily towards his child. This child is like a mirror to him reminding him of himself as a child and of what they tried to get away from (their own ADHD) that now manifests itself in their own child. On the other hand there are parents that once their child is diagnosed having ADHD tend to understand what the child is going through from their own experience. They can say to themselves 'I was a child like that, but at that time they did not know to diagnose it and they told me that I was lazy and stupid.' This parent needs to cope with difficult experiences he had as a child, at the same time he has to adjust to his child. Once he understands that he had lost so many opportunities that he could have realised if only he had been diagnosed correctly and treated properly. For these parents their child is a corrective experience and they can be very supportive (Yishai-Karin, 2002).

Factors that can protect the child against developing low self-esteem and adopting low functioning levels are first and foremost the investment by parents in their child. For example investing in high impact quality time, for example father and son quality time. Most of all **supporting** parents who have the capability to be flexible, empathic and with the ability to celebrate success with their child, can help him to

over-come the obstacles that he faces due to having ADHD (Niederhofer et al., 2002; Yishai-Karin, 2002).

Lowering the level of stress and depression at home and improving the home environment can help a child diagnosed as having ADHD. This and other similar adaptations of the home environment to meet the needs of children diagnosed with ADHD will support the creation of a positive family experience. On the other hand, rejection, or alienation of parents towards the child encourages aggressive behaviour (Barkley, 2009b).

According to the Clinical Practice Guidelines of the American Academy of Pediatrics (Academy of Pediatrics, 2001, in Fine et al., 2003) it is vital to first educate the parents about the nature of ADHD and its effect on the child's learning, behaviour, social skills, self-esteem and family function. Explanation of the biological basis of ADHD could help parents understand their child and the difficulties he or she is having (Fine et al., 2003).

Another factor, which can help a child with ADHD, is activity in music, sport or art supported by therapy. Through the activity in music, art or sport, especially horseback riding, the child can experience successes, which can act as building blocks during therapy (Yishai-Karin, 2002).

In school, teachers are needed to be supportive and aware professionals that can design a learning environment that facilitates the learning, growth and development of children diagnosed with ADHD integrated in the regular classroom.

2.4.3 Treatment for ADHD:

According to the research literature effective treatment for ADHD requires combining the use of stimulant medication, such as Ritalin or Conzerta, with psychotherapy such as behaviour modification (Chronis, Jones and Raggi, 2006). The estimated use of medication is at least 85% for children challenged by ADHD (Olfson et al, 2003). Ritalin is a form of methylphenidate and is the most common treatment for ADHD. The evidence shows that medication has beneficial effect on children challenged by ADHD facilitating attention and learning processes that when managed by therapists and educators can bring about positive behavioural changes among the majority of children with ADHD (Swanson et al. 1999). These

children tend to take the Ritalin before they go to school and feel calmer and able to concentrate in school. As a result, they are able to cooperate at school and their learning outcomes are improved. In addition, negative social behaviour, like aggression and inappropriate peer interactions are reduced in medicated children (Chronis, Jones and Raggi, 2006).

On the other hand, the medication has its side effects. The treatment of ADHD with medication has been known to produce effects such as insomnia and appetite suppression and recent recommendations stress the need to use other methods of therapy instead of medication with Ritalin or similar drugs (Yagil, 2008). Yagil (2008) argued that healing herbs, vitamins, biological feedback, such as biofeedback and neurofeedback and cognitive training, are among the many alternative treatments for ADHD. In addition Yagil (2008) stated that it is clear today that there are many therapeutic strategies and that their common goal is the improvement of the individual's self-control over his psycho-physiological reactions, which include the level of general stress, muscle stress, blood pressure, pulse, breathing and brain weaves. The therapist teaches his client how to reach physical and mental relaxation. In addition, a systematic de sensitisation of the need for activity and physical over reaction, which characterises individuals challenged by ADHD, is employed to balance the client.

Yagil (2008), a behavioural – cognitive therapist, emphasises an integrative approach to therapy, which includes family therapy and corrective teaching. According to Yagil, therapy should work on changing the individual's beliefs about himself and his surroundings. It should focus on treating the low self-esteem and the low self-image of clients, the social difficulties the child experiences, the client's fears and anxieties, and focus on changing the child's reliance on negative coping patterns when faced with difficulties. Clients come to therapy with extreme coping strategies such as being passive or avoiding engagement on the one hand, or being aggressive and rebellious refusing to cooperate with parents, teachers or other figures of authority, on the other. The integrated therapy focuses on building a positive relationship and establishing therapeutic alliances with the child, and by encouraging the child to become an active partner in the therapy when he is aware of the therapeutic objectives and agrees with them. Different therapeutic activities, such as games, drawing, sculpting, story telling with or without animals are suitable

for a child challenged by ADHD. These therapeutic activities address his abilities rather than his disabilities. The child readily engages with them because he is aware that he has a real opportunity to succeed and earn an immediate reinforcement for his success and because the learning environment created by the therapist is non judgmental and serves to amplify even the smallest successes (Kreindler and Kreindler, 2012). Through such therapy, the child can improve his self-image, reconstruct his self-perception and improve his self-esteem. Yagil found that in such a therapeutic setting the child gains new motivation and can believe more in himself and his strengths and can start planning his future (Barkley, 1998; Gelso and Samstang, 2008; Yagil, 2008).

Treating children with ADHD requires a systems approach to therapy.

> *Children exist within multiple contexts – most notably, home and school – that may include a multitude of risk and/or protective factors that must be modified or fostered in treatment in order to enhance developmental outcomes* (Chronis, Jones and Raggi, 2006, p. 487).

I argue that the application of the Chronis, Jones and Raggi (2006) work to THR requires that a coalition be created between the major stakeholders in the child's wellbeing: the THR practitioner, the family doctor and or neurologist, the parents, the child's teachers and the child himself. This coalition may differ from case to case, but all require management and commitment on the part of all those involved.

A Case Management Model (Onyett, 2004) requiring the collaboration and coordination between the child, the parents, the teacher and managed by the therapeutic horseback practitioner (therapist), is crystallising as my preferred therapeutic model. In order for a child challenged by ADHD to develop and progress as a whole and fulfilled human being, he/she needs intensive support, emotional and scholastic support, throughout his/her development.

The Case Management Model (Onyett, 2004) requires that professional relationships be built between the case manager and the parents and between the case manager and the teacher. The home and the schools are the places the child spends most of his time. Both places are important in shaping and supporting the child's behaviour.

Greenspan and Greenspan (2009) discussed seven key goals in treating children challenged with ADHD: strengthening their motor functioning, helping the child plan, sequence his actions and thoughts, modulating a child's response to sensations, reflective thinking, building self-confidence, improving family dynamics and building a healthy environment. In **strengthening motor functioning** Greenspan and Greenspan (2009) argued that the intervention requires work on the child's fundamental ability to control his body and to use his nervous system in a healthy and in an age appropriate way. The work will be on balancing, co-ordination, movement, integrating left and right neurological sides of the body, co-ordination of hand and eye movement, gross and fine motor skills. The second key therapeutic goal is **helping the child plan sequential actions and thoughts.** Greenspan and Greenspan (2009) argued that children with ADHD typically have difficulty with motor and verbal sequencing. It is hard for these children to play games that require them to attend to serial clues or to solve academic problems that require work in steps. **Modulating a child's response to sensations** is a third therapeutic goal according to Greenspan and Greenspan (2009); children with ADHD often have difficulty in processing sensory stimulation. Some children are over reactive and some are craving for stimulation. The goal is to help them modulate sensation and self-regulation. In **Reflective thinking,** the goal is to help the child to develop meta-cognitive skills such as reflective thinking. The child will be able to know what he is able to do and what not and reflect on his actions. In **Building self-confidence,** Greenspan and Greenspan (2009) argue that by facilitating the child's ability to complete tasks and experience successes, his self-confidence will improve. In addition Greenspan and Greenspan (2009) argue that it is important to **Improve family dynamics.** The child's interaction with his family contributes a great deal to the realisation of his therapeutic goals. And the last goal is to create **a healthy environment.** An overactive child needs a quiet and toxin free environment (free of toxic paint and lead in particular). The child needs a healthy diet and sufficient sleep.

In their discussion of the goals for treating children challenged by ADHD, Greenspan and Greenspan (2009) emphasised seven key goals. As we can see in the next subchapters (2.5 and 2.6) these therapeutic goals can be met through Therapeutic Horseback Riding (THR).

2.5 Therapeutic Horseback Riding:

Even though therapeutic horseback riding is a relatively new discipline, I found evidence that man has considered the horse to be his friend and healer in ancient times, a friend, which needed to be taken care of and be loved.

Xenophon, who lived in ancient Greece in 401 BC, related to horseback riding as an art. Xenophon is also often cited as being the original "horse whisperer", having advocated sympathetic horsemanship in his writings, where he detailed the selection, care, and training of horses for the use both in the military and for general use. Xenophon stated that the work of training a horse requires a complex relationship of love and care between the trainer and his horse (Morgan, 1993). Xenophon attributed the virtues of health and education to the horse

> *The horse is a good master not only to the body, but also for the mind and for the heart* (Auvinet, 2001, p. 44).

The ancient Greeks are also known for their practice of using horses for rehabilitating wounded soldiers (Mackinnon, et al., 1995).

The followers of Hippocrates recommended horseback riding activities as a treatment for all sorts of maladies. Galen and Orebasius (in Butt, 1981) in their early writings discussed the therapeutic process that takes place between men and horses (Butt, 1981).

In 1566 Markurolios published his book "The Art of Gymnastics", where he described the influence horseback riding, with its special and various cycling rhythms, has on the rider. Markurolios found and reported that the main influence horseback riding has on the rider is in his ability to rehabilitate the overall health of the rider (Conway, Mackay and Roberts, 1988).

Lord Thomas Sundenham, a British doctor, argued as early as 1670, that there is no better therapy for the body and for the soul than riding a horse for a few hours every week (Arkow, 1987). Hunt, a British doctor, who founded the Oswestry Orthopedic Hospital in 1901, and Sands who was a physiotherapist who brought her own horses to a hospital outside Oxford to provide riding opportunities to soldiers disabled in the war, were the first to coin the phrase ‘Riding for the Disabled’ (Baki, 2005).

Many researchers in the field of therapeutic horseback riding (Baki, 2005; Griffith, 1992; Pauw, 2000; Rolandelli and Dunst, 2003; Rufus, 2001; Scott, 2005; Selby, 2009) identify the Danish woman, Liz Hartel's accomplishment as a defining moment during the genesis of therapeutic horseback riding. Hartel who had become disabled in both her legs when she contracted polio, needed the use of a wheelchair to move around, but did not stop trying to ride and rehabilitate herself. In 1952 Hartel rode her horse Jubilee at the Helsinki Olympics and received the Silver medal in Dressage (horse training). This was the first Olympic games at which men and women were required to compete under the same conditions. This added yet another challenging factor beside the fact that she had to compete against able bodied riders. Hartel's achievements were inspiring to many, and sparked the interest of people in various countries to start riding activities for the disabled in their areas. Hartel's achievements are regarded as the trigger for the formation of the first therapeutic horseback riding centers in Europe. As more and more medical and equine professionals took notice of Hartel's achievements additional centers for therapeutic horseback riding sprang up in Europe (Baki, 2005, Paravani, 2009).

In Norway, physiotherapists Elsebet Bodthker and Ulla Harporth incorporated riding in their programme for their patients. Bodthker was able to bring her professional skills and her riding skills together. The two therapists soon found that riding was quite helpful for achieving good results with their patients.

Canadians and Americans studied what was happening in Europe and quickly made plans to start Therapeutic Horseback Riding centers in their own countries. The first therapeutic horseback riding center in Canada was the Community Association of Riding for the Disabled (CARD) in Toronto, Ontario, founded in 1969 and

> *...whose mission is to improve the lives of children and adults with disabilities through quality therapeutic riding programmes* (www.card.ca/ Jan.25, 2011).

CARD is a non-profit organisation, which helps more than 700 children and adults with disabilities, each year. According to CARD's report their riders:

> *...gain greater physical, cognitive and social skills, improving coordination, muscle strength, balance, focus and communication, while develop in self-esteem, self-confidence and fostering mobility*

> *for greater independence and an improve quality of life* (www.card.ca/ Jan.25th,2011).

Recognising the need for an organisation to act as a clearinghouse for information on therapeutic riding, 23 individuals gathered at the Red Fox Inn in Middleberg, Virginia, on November 2, 1969, and laid the groundwork for the North American Riding for the Handicapped Association, which is now known as NARHA, to promote Equine-Assisted Activities and Therapies (EAAT) for individuals with special needs. NARHA's vision is:

> *NARHA changes and enriches lives by promoting excellence in equine assisted activities and therapies* (www.card.ca/ Jan.25th, 2011).

In 2008 there were*:*

> *...over 700 NARHA programme centers currently in operation in the United States and Canada serving an estimated 42,000 individuals with disabilities* (Elliot, Funderburk and Holland, 2008, pp. 18-28).

Today, many medical professionals, including the American Physical Therapy Association and the American Occupational Therapy Association, recognise the therapeutic value of equine assisted activities.

Four years after the establishment of NARHA, in 1973, Sampson and Finlay established the South African Riding for the Disabled Association, (SARDA) in Cape Town. Today there are branches in Durban, Port Elizabeth and on Highveld (established in 1984) with branches spreading all over the country.

Therapeutic horseback riding initially was regarded as mainly an adjunctive form of physiotherapy (Brooks, 2006; Lentini and Knox, 2009) shown to relieve spasticity of muscles and improve coordination and balance. However, authors who reported that there was some relief of spasticity of muscles showed additional secondary benefits from the therapeutic horseback riding, due to the connection between the rider and the horse. Mayberry (1978), for instance, reported additional benefits to be derived from horseback riding therapy, over and above the physical benefits ascribed to the horses' movement:

> *As a result of the relationship between the horse and the child, over and above the physical benefits of the horses' movement* (Rufus, 2001. P. 57).

Mayberry (1978) was referring to psychological benefits.

DePauw (1986), an American researcher conducted a wide literature survey on research that investigated therapeutic horseback riding programmes for the disabled people and claimed that:

> *…it is critical that professionals in horseback riding for individuals with disabilities a) collect empirical evidence supporting the claimed benefits, b) develop appropriate evaluation instruments/tools, c) identify effective intervention techniques, d) provide for accessibility of publications/ information from Europe, and e) develop printed and audiovisual materials for the health professional community* (DePauw, 1986, p. 217).

Horseback riding in its essence is therapeutic and is based on the connection between man and horse and on the physical activity related to the riding. Through horseback riding and being close to the horse, a therapeutic process is facilitated in an unthreatening environment, which encourages personal and social growth (Baki, 2005).

Horses are big and powerful. Being close to them requires keeping safety rules and learning skills that will prevent dangerous situations from developing. Some of these skills like responsibility, self-discipline, self-control, awareness of boundaries, obeying rules, self and environmental awareness can contribute significantly to the client's quality of life (Baki. 2005; DePauw, 2000).

I found that in my own practice, these skills (e.g. responsibility, self discipline, self control, obeying rules and awareness of boundaries) are often the most challenging to children diagnosed with ADHD. Severe deficits in these skills were reported by my clients and were prioritised as high ranking therapeutic objectives.

Rufus (2001) found that therapeutic horseback riding provides the child with the opportunity to learn the skill of horseback riding. This is an opportunity for success. Acquiring the ability to control and ride a horse is a significant achievement (Rufus, 2001). Many researchers agree that therapeutic horseback riding is mainly for physically disabled children, it **improves social skills**, (Biery, 1985; Mayberry, 1978; Webb et al., 1997, in Buck, 2001), **increases motivation** (Rosenthal, 1975, in Buck, 2001), **reduces depression** (MacKay-Lyons et al., in Buck, 2001), **teaches responsibility and how to participate in a care-giving relationship (**Mayberry,

1978), **improves behaviour** (Brown, 1997, in Buck, 2001) and **promotes teamwork** (McDaniel, 1998, in Buck, 2001). The findings show that when children are riding horses, they are happier, more confident and more motivated to learn than when they are in the classroom or at home. They are concentrating on their riding skills, and trusting in their relationship with the riding instructor and the horse.

Elliott, Funder and Holland (2008) investigated the perceived impact of a therapeutic horseback riding programme on children with mild to moderate physical and mental disabilities. In their study they have interviewed five children with a variety of physical and cognitive disabilities and at least one parent of each child. Qualitative data analysis procedures were used to explore the participants' views and opinions on the "Stirrup Some Fun Therapeutic Riding Programme."

> *Several themes emerged from the interviews with the participants and their parents, including (a) enjoyment, (b) the child/animal connection, (c) social relationships with volunteers, (d) perceived physical benefits, and (e) the social and mental benefits of the programme* (Elliott, Funderburk, and Holland, 2008 .p. 18).

In-spite of the fact that therapeutic horseback riding is currently being used in thousands of programmes throughout the world,

> *...only a limited amount of research has been conducted to assess the therapeutic effectiveness of horseback riding for people with disabilities* (Elliott, Funderburk, and Holland, 2008 p. 20).

But, most researchers agree that there is no doubt that the horse's rhythmic movement, and the fact that it resembles a human's way of walking improve many aspects of the rider's body and mind condition, like muscle tone, posture, strength, coordination, flexibility, cognitive and social skills (Borzo, 2002).

Shkedi's (2004) work concentrated on the question: “Why the horse?” and explains that the horse, according to the way it is perceived by us today is a very sensitive animal with the capability of creating a relationship with human beings. Shkedi (2004) is convinced that not only is the horse a very sensitive animal, but that it is ‘born with the ability to inspire humans through dreams and fantasies, symbols and archetypes, through non-verbal communication (meta-communication), reaching out to the conscious and unconscious human mind. Shkedi (2004) believes that this

unique man-horse experience supports creativity, spirituality, mystical union, improving self-confidence and self-awareness, and higher levels of thinking. Shkedi found that symbols can spur personal growth (Shkedi, 2004). To confirm her theoretical findings, Shkedi (2003) investigated special education learners. She gathered data from case studies, and used interviews and questionnaires. Shkedi (2003) emphasised the importance of meta-communication that is being taught through therapeutic riding. One of the students in the case study said: "…yes my body spoke a special language, talking but not speaking to me…The horse has taught me that I can use my body" (Shkedi, 2003, p. 106).

Shkedi concludes with the following recommendation:

> *I highly recommend that Therapeutic Riding becomes part of the daily programme for all special learners. ...I suggest that equine studies be available to all learners* (Shkedi, 2003, p. 97-98).

In her analysis of findings Shkedi (2004) integrated classic learning and teaching theories like Dewey (1939) and Jung's (1963) analytical theories which are heavily reliant on symbols. These are 'old' contributions, classical, but the approved corner stones for today's attempt at rejuvenating the integration of students challenged by ADHD in the regular classroom.

While Shkedi's (2004) work was less than empirically rigorous, it summed up the beliefs of THR practitioners regarding the special role the horse plays during THR. Another question asked by the researchers Litman and Chen (2006) focused on the causes of change (improvement) in the rider with special needs during therapeutic horseback riding. The researchers interviewed ten therapists who used horses to meet their clients' therapeutic goals of change.

Litman and Chen (2006) found that therapeutic horseback riding contributed to three major areas: the medical, the educational and the recreational (sport areas). On the medical level, therapeutic horseback riding contributed to the improvement of the physical conditioning of the clients with physical limitations. Therapeutic horseback riding worked on the rider's balance, coordination, breathing, and similar physical deficits. Therapeutic horseback riding helped create balance, relieved muscle tension, and gradually facilitated the development of basic body movements

(like gaining control over head movement and the movement of other parts of the body). The findings showed that improvement in these areas occurred mainly due to the horse's special movement (gait), a movement characterised by pelvic rotation in three planes that is similar to human movement.

On the educational level, the focus was on riders challenged by mental and emotional limitations, as well as developmental limitations, learning disabilities and behavioural problems. Typical therapeutic goals for riders in THR programmes are: to reduce anxiety, frustration and fear, and to develop trust and self-confidence. Therapeutic horseback riding contributes to the development of new learning habits and strategies, improves the ability to concentrate and facilitates positive social behaviour (Litman and Chen, 2006).

On the recreational level, horseback riding as a sport improved the mental and the physical health of individuals with mental and physical limitations. Using horses for physical exercising in order to participate in local or international competitions can give challenged riders the feeling of achievement and success they need.

Litman and Chen (2006) interviewed ten THR practitioners (THRPs), in Israel, who specialised in therapeutic horseback riding in order to find out what the dominant variable was in their practice that lead to change and improvement in the rider's life (cognitive, emotional and behavioural change). No consensus emerged among the THRPs about any one dominant variable. One THRP stated that the immediate feedback that the rider gets from the horse raises his self-esteem and self-confidence. Another THRP stated that the movement of the horse relaxes the client and thus enables the client to communicate. Another THRP stated that the special relationship that is created in the triangle therapist-client-horse, within the riding environment, builds mutual trust, which in turn enables the client to develop and improve. There was definite agreement among the THRPs that therapeutic horseback riding does contribute to the rider's quality of life. All the THRPs also agreed that therapeutic riding contributes to a state of readiness for learning and induces openness in the client. The researchers tried to link the data to theories of motivation such as Maslow's 'pyramid of needs'. According to this research therapeutic horseback riding satisfies certain needs that may be different from one client to the other. The THRPs voiced their belief that their clients join THR

programmes stuck between developmental levels, and only after fulfilling this particular need to break through being developmentally stuck, is the client free to continue to learn, to develop and is ready to work on his difficulties and move on to the next level. For example, one of the THRPs stated that the movement of the horse fulfills a need for movement in the rider (with difficulties, like ADHD) and only after this need is fulfilled the rider is free and open to communicate with her (the THRP). The researchers stated also that observing the clients and the THRPs, brought them to the conclusion that there seemed to be a very strong and a real connection between them. In addition the observations showed that there was a high level of emotional engagement and frequent laughter during the process of the therapy. The researchers stated that these two factors may be contributing to the development of openness and readiness to learn that the THRPs mentioned during their interviews.

It is important to note that none of the THRPs measured objectively the changes that the rider went through and what they have said was only based on their own observations and impressions.

The implied non-verbal communication between humans and horses and the fact that the horse accepts the person and is not critical or judgmental is a major theme in THR research. This theme echoed deeply within the system of beliefs that crystallised following my own experiences as a rider, breeder and trainer of horses. Horses talked to me, they listened to me and understood me and counseled me when I was stressed. This system of beliefs guided me to seek certification as both a THRP and as a horseback riding instructor.

My training as a clinical social worker and family therapist allowed me to see the similarities between the therapeutic climate I create in my clinic and the therapeutic climate a professional THRP must create in the arena. Both climates are created by accepting the client without criticism and judgment, in order to remove artificial obstacles to his natural growth and development processes. Both therapeutic climates require that the client be willing to engage with the therapeutic programme and therefore must be aware that he is in therapy and not in a recreational setting (Beck and Katcher, 1996). In this research I investigated the practice of THR as it applied to clients diagnosed with ADHD and referred to THR.

2.6 Therapeutic Horseback Riding for Children Challenged by ADHD

This thesis investigated the practice of therapeutic horseback riding and it's application to children who were diagnosed with ADHD. Zanin (1997) addressed Attention Deficit Disorder and Therapeutic Horseback Riding, from a medical point of view. He endeavored to answer questions concerning Attention Deficit Disorder (ADD) and Attention Deficit Hyperactive Disorder (ADHD). Zanin found that for years, therapeutic horseback riding programmes have been a haven for riders with ADD with and without hyperactivity. A very important point that Zanin mentioned was that in other sports the symptoms that characterise the hyperactive riders (impulsivity, distractibility and hyperactivity) have frequently prevented success. However, therapeutic horseback riding with its individuality and novelty seems to be the natural medium for these "motor-drive" children. Additionally, from the research on ADD and ADHD, it becomes clear today that there is a considerable amount of diversity within the scope of the attention deficit disorder and that many of the children are on medication, thus presenting the THRPs with a heterogeneous group. The horseback riding instructor should be aware of the side effect of medication and is advised to consult with the rider's parents, teachers, psychologist, therapist, etc. to help inform the design of the learning environment and it's individual adaptation to the needs of the rider prior to the riding session. By surveying all significant stakeholders, the THRP will be better able to prioritise some of the predominant symptoms challenging the child with ADD or ADHD and facilitate the prioritisation of the therapeutic objectives (Pilszka, 2009; Barkley and Murphy, 2006, Yishai-Karin, 2002; Greenspan and Greenspan, 2009; Maoz-Arie, 2012)

There are only a few researchers that investigated directly Therapeutic Horseback Riding (THR) and children with ADHD (Basile, 1997; Cuypers, De Ridder and Strandheim, 2011 a Pilot research; Hosser, 2012). Most of the THR researchers investigated THR and children with Cerebral Palsy, (Bertoti, 1988, 1991; Casady and Nichols-Larsen, 2004; Cherng et al., 2004; Naidoo, 2009), children with Autism (Bass, Duchowny and Liabre, 2009), children at risk (Kaiser et al. 2006; Trotter, 2006, 2012), and youth with severe emotional disorders (Carrie, et al., 2007). According to Gamache, (2004) the research showed "improvements in physical

abilities such as posture, range of motion, trunk strength, coordination and visual perception" (Gamache, 2004, p.2). Garmache (2004) reported that:

> "*despite the increasing popularity of equine-assisted therapy, there is a scarcity of scientific evidence supporting the claims of benefits, reasons for benefits, and why certain equine-assisted activities are beneficial*" (Garmache, 2004, p. 2).

Research conducted in other countries and cultures (Basile, 1997; Hosser, 2012) on children diagnosed having ADHD, also reported no significant changes in the child's behaviour at home or in school following THR. Basile (1997) conducted her research in Louisiana, U.S.A, on 9 – 14 year old children diagnosed as having ADHD. The purpose of her research was to explore and describe the psychological effects of Equine Facilitated Therapy (EFT) on behaviour and self-esteem in children with ADHD (Basile, 1997). In Basil's research a pretest/posttest design was used to explore the effect of EFT on three identified ADHD symptoms: impulsivity, difficulties in paying attention to tasks and lack of respect for others' personal boundaries. In addition, the effect of EFT on self-esteem was explored. The results of that research showed no significant changes in the pretest/posttest scores in all areas.

Hosser (2012) evaluated the effectiveness of therapeutic horseback riding on children diagnosed having ADHD and or other social problems. In a monograph published by Braunchweig University of Technology and Volkswagen Financial Services in Germany, two groups of twenty (20 children) aged between 5-12 years old challenged by ADHD and/or other social problems were randomly assigned to either a THR treatment group or to a social experiential training treatment group. No significant changes were found between the before and after scores of the two groups on concentration, control, self-worth, general well being, empathy and cooperative behaviours. Both treatment groups showed significant improvement on ADHD related symptoms and were less aggressive socially following respective treatments. From these findings, the author concluded that THR is just as effective as other children centered therapies. However the motivation to participate in THR was extremely high when compared to the motivation of children to participate in a social experiential training group (Hosser, 2012).

2.7 Transfer

Transfer of learning occurs when learning in one context is applied in another context (Perkins and Salomon, 1988).

> *It is easy to believe that transfer has at least a potential role in virtually all walks of life. But* ***transfer does not take care of itself****, and conventional schooling pays little heed to the problem. With proper attention, we can do much more to teach for transfer than we are now doing* (Perkins and Salomon, 1988, p.23).

Perkins and Salomon (1988) point out that education in its essence hopes to enable the transfer of skills it teaches, from the classroom to the world after school. This is the case in teaching the skill of reading for instance. When the student learns how to read different stories from a text book, the idea is that this reading will prepare him to be able to read a wider range of readings and not just text books: readings like newspapers, job applications, income tax forms, contracts, wills and so on. The same applies to the teaching of mathematics skills. The student is expected to be able to transfer these skills to the world outside the school, to be able to count money when paying for goods bought, to be able to invest money in the stock market, balance a checkbook and act effectively in other fields, which require the use of mathematics.

We should expect no less from Therapeutic Horseback Riding. Children diagnosed with ADHD in THR programmes learn skills designed to enable them to reach their therapeutic objectives. The application of these skills requires that the child transfer newly learned or developed skills during THR to the world outside the riding arena, to the school and home learning environments (Perkins and Salomon, 1988). In order for the transfer to occur certain conditions must be met. The school environment and the home environment must be supportive of the new skills, reinforce them and celebrate the successes they bring.

Perkins and Salomon (1988, 1992) researched the issue of transfer and wrote extensively about it. One of their statements was:

> *Whether transfer occurs is too bold a question. It can, but often does not. One needs to ask under what conditions transfer appears* (Perkins and Salomon, 1992, p.6).

Salomon developed together with Prof. David Perkins (1992), from the University of Harvard a new theory on the transfer of learning. They have asked themselves if learning A can contribute to learning B better. For example, can a person who is an expert in the game of chess, solve political strategic problems better? Or does a student apply spontaneously a principle of physics he has learned to other topics, which are not related to physics? Salomon and Perkins developed an entire theory on this subject, which derived from the question whether the computer programming learned by children will apply to their way of thinking in general. They came to the conclusion that this type of application depends on the way subject A is being taught and its relationship to subject B. Their theory holds that there are two ways to transfer learning: The 'low road' and the 'high road'. The low road of transfer involves the infinite practice of subject A until the student has full control, almost automatic, like in driving a car, over the subject. Once a student learns how to drive one make of a car, he can drive any other similar make of car (B), also when they are not exactly the same as the one he originally studied on (A). Thus -

> *Low road transfer happens when stimulus conditions in the transfer context are sufficiently similar to those in a prior context of learning to trigger well-developed semi- automatic responses* (Perkins and Salomon, 1992, p. 8).

The high road of transfer is when from learning subject A one can abstract a general principle that can be implemented or applied to subject B. This can happen only as long as the learner consciously looks for such a principle.

> *High road transfer, in contrast (to the Low road transfer) depends on mindful abstraction from the context of learning or application and a deliberate search for connections: What is the general pattern? What is needed? What principles might apply? What is known that might help? Such transfer is not in general reflexive. It demands time for exploration and the investment of mental effort* (Perkins and Salomon, 1992, p. 8).

High school students who were learning the Logo programming language were expected to transfer principles of learning and problem solving to other subjects they studied in school and outside of school. The research showed that students that studied computer programming were not able to transfer this kind of learning to other learning environments on their own (Salomon and Perkins, 1987; Salomon and Perkins, 1989 and Salomon, Perkins and Globerson, 1991).

From researching the effect that learning computer programming has on children, Salomon came to the conclusion that computer programming by itself has no affect on the process of learning and the transfer of learning by children. What is important in order for transfer to occur is the facilitation of transfer by the whole learning environment, which includes: the teachers, the activities and tasks, the relationship between the students themselves and between the students and the teachers as well as the subject matter. Salomon emphasised that the most important strategy designed to facilitate transfer is to design constructive learning environments. In those environments students will experience real life problems and in small groups, led by a teacher, they will have to cope with and solve these problems using a variety of options and skills first learned while studying computer programming.

The importance of the learning environments in the process of transfer is also mentioned by other researches (Brookfield, 2007; MacKeracher, 1996; Mezirow, 2000) who stressed the importance of a learning environment free from threat and in which interpersonal relationships are based on trust. This is true equally about adult learning processes and about the learning processes of young learners.

In addition, the importance of transferring learning to new situations is stressed by other researchers. These researchers found that it is necessary to activate the new knowledge so that transfer will be facilitated (Bransford et al., 2000; Gelman and Lucariello, 2002; Singley and Anderson, 1989).

Flint (2002) emphasised that, "the end goals of education or training are not achieved unless transfer occurs" (p. 1). Flint points to Mila and Sanmarti's (1999 in Flint, 2002) definition of transfer to support his thesis:

> *Transfer of learning occurs when the learning in one context or with one set of materials impacts the performance in another context or with other related materials* (Flint, 2002, p.1).

Furthermore, there are factors that facilitate transfer. Some of these factors are: learning that is considered to be relevant and meaningful and the achievement of high quality learning outcomes and significant similarities between the two learning environments between which transfer is being facilitated. Research shows that principles are more easily transferred than knowledge and that the design of positive

environments for learning, environments that reinforce learning, are important for the facilitation of transfer (Bronner, in Flint, 2002). Another critical factor that influences transfer of learning is "*the extent to which one is able to practice and receive constructive feedback*" (Flint, 2002, p.3).

2.7.1 The Transfer of Personal and Inter-personal Social Skills and Learning Skills:

Therapy is about building learning skills and personal and inter-personal social skills in the therapeutic setting. These skills in turn are used by the client to fine tune his awareness and construct new knowledge about the world within the therapeutic setting. The therapist then facilitates the client's transfer of these skills and knowledge to the world he needs to function in, when not in therapy. The application of these skills and the use of this knowledge in contexts other than those, in which the learning skills and the knowledge were initially created, are among the most important goals of therapy and a measure of its efficacy. I believe that the ability of therapeutic horseback riding students to transfer newly built knowledge about themselves and others and about the quality and strengths of their newly acquired learning skills, between learning environments, and the ability of THRPs to facilitate this transfer process, should be recognised as measures of therapeutic effectiveness. The task of THRPs and clients is to bridge the distance between the therapeutic setting and other learning environments the client needs to function in effectively and efficiently, such as the family and the school setting (Kreindler and Kreindler, 2012).

2.8 Learning from success, celebrating success and amplification:

Learning from Success is a learning strategy firmly rooted in the Learning Theory developed by Skinner (Bandura, 2011; Skinner, 2002, 2011) and later enlarged and refined by Rogers (2003). The Learning Theory recognises the need for effective reinforcing during the learning process, argues against the uses of aversive control in the learning process and sees Learning from Success as a powerful motivator for the learning process.

In the mid 1990s Prof. Jona M. Rosenfeld from the Hebrew University of Jerusalem's School of Social Work and Prof. Donald Schon from MIT's Sloan

School of Management, who had developed the concept of the 'Reflective Practitioner' (Schon, 1984) sought to facilitate learning from the successes of eight innovative projects on children and youth at risk. Their idea was that by applying the Reflective Practitioner concept to the meaning making processes of practitioners, practitioner knowledge could be developed and managed so that other practitioners could learn how to provide better services for the families and children in their care (Rosenfeld, 1987; 1990).

Following their successful collaboration Prof Rosenfeld established the Learning from Success Unit (LSU) in 1995, and since then the LSU staff has successfully trained professionals to manage their successes, celebrate them and learn from them in a variety of professional fields in Israel, including health care, the social services, education and the employment services.

Schon (1984) went on to develop the related concept of deep learning and the 'Double Loop Model' of corporate learning both based on the development of a reflective practice in an environment where learning from success is a dominant cultural value (Argyris and Schon, 1978).

Rosenfeld (1987, 1990) and Schon's (1984) methods of training practitioners are used to create internal benchmarks of quality and emphasise the use of the learning from success strategy as a catalyst for creating learning environments that can sustain continuous learning and growth. The approach to Learning from Success is based on three types of interconnected, collaborative learning processes. The first process is the 'retrospective process' or the learning from past successes process. It requires the learner to be skilled in reflecting on practice. The second process is the 'prospective process' the learning by planning an action with regard to an unresolved problem and carrying it out. This process requires the learner to learn from achieved milestones, drawing and implementing conclusions, testing them out and measuring the results against internal benchmarks.

The third process is the 'learning-on-learning for action process'. This process requires learners to be skilled in reflecting on action. The process continuously upgrades the effectiveness of personal and systemic learning processes and is powered by the perpetual improvement management philosophy.

Learning from success requires that we analyse the specific actions that contributed to our success so that we may formulate a plan of action based on the principles of action that constituted the essential elements of what has led to success in the past and can do so in the future.

Greenberg and Cohen (2012) researched the principles of action that led students with learning disabilities to experience success so that these principles can be applied in order to promote future successes. The principles created the conditions that facilitated the development of a sense of success, elicited the decision of learners to assume personal responsibility and the development of a repertoire of actionable knowledge. Their findings showed that when these principles were applied the students showed significant and sustainable improvement in the quality of the learning outcomes achieved.

It has been my experience that practitioners are reluctant to share success stories. Cultural values do not encourage taking public credit for personal success, and such behaviour is often viewed as 'immodest'. And yet it is hard to learn from successes, your own or the success of others, if one does not have the opportunity to examine the specific actions that contributed to the success. For the effective examination of successes these have to be celebrated and brought to the attention of other learners (Reeves, 2002; Peters and Waterman, 2004).

Here is what Peters and Waterman (2004) had to say about the need to celebrate and disseminate successes:

> *...excellent companies are not only designed to produce lots of winners they are constructed to celebrate the winning once it occurs* (Peters and Waterman, 2004, p. 58)

Schechter (2010) explored the evolution stages of a group 'learning from success process' within the framework of a professional learning community of teachers intent on improving student achievement in their school. His findings led him to conclude that the learning from success methodology provides a different view of school reality than the traditional deficit based staff development methodology.
Learning from success represents a shift in accepted social paradigms, a departure from our tendency to focus on failure, trying to identify how to apportion the blame

for the failure. Wiggins and McTighe (2007, p. 267) suggested that learning requires the conscious "*examination of any inconsistency between action and ideal*" and correcting the error between the learner's intention and the results obtained. Focusing on success instead brings forth self-confidence, social competence, a positive self-image and the production of quality learning outcomes (Oplatka, 2008). This paradigm replaces the problem-solution medical paradigm with a paradigm that focuses on the growth and development of individuals and systems (Zifroni, 2006), promoting health and well being factors rather than treating illnesses.

THRPs need to be 'addicted' to the success of their clients and carefully monitor their progress in the riding arena, at home and in school. Recognising and celebrating even the smallest evidence of progress should be frequently and publicly done (Eaker and Gonzalez, 2006). Nolan (1999) found that the analysis of ones own successes and best practices is a methodology well suited for rapid process improvement. Therapeutic Horseback Riding (THR) is a form of Solution Focused Short-Term Therapy (de Shazer, 1988). The client engages with THR for a limited number of sessions to work on learning and improving skills that can help him achieve his therapeutic objectives. This study focuses on the learning and growth processes of children challenged by ADHD. In Israel the Major Medical Insurance Carriers will subsidise up to 30 sessions (the Israeli Equestrian Federation, 2011) and a typical case will involve at least nine therapeutic objectives. On the average, a THRP has about 6 sessions for each of five therapeutic objectives, an additional four objectives being overarching compound therapeutic objectives (self confidence, social competence, a positive self image and the production of quality learning outcomes). Quite clearly than, the rapid learning process improvement methodology of learning from successes is needed in order to meet our client's therapeutic objectives effectively (de Shazer, 1988; Quick, 2008).

Heath and Heath (2010) argued that paying attention to failure may be effective when reviewing disasters where one factor might be the cause of the disaster. However when we are called upon, as THRPs often are, to facilitate major changes in a system, changes in more than one factor will be necessary. A child's report card may be full of Ds and Fs, his parents and teachers are likely to complain that he is

unmanageable, the child is likely to complain that he has no friends. Asking ourselves '*what is wrong with the child?'* and '*how can I fix it?'* would be useless as a therapeutic strategy. Both the THRP and the child would be overwhelmed by the immensity of the task. When it is time to change, Heath and Heath (2010) argue, we must look for bright spots of success, little nuggets of success (Grant, 2007) the child produces as he brings home the first precious C's and B's. The parents would ask: '*How did you do it? What is working? How can we do more of this?'* and push to celebrate these events with the child.

I argue that THRPs should devote a formal part of the time they spend facilitating the learning of new skills to the systematic acknowledgement and celebration of achievements and successes, and, the sheer effort the child has invested into the developing process leading to the achievement of his therapeutic objectives (Marzano, Pickering and Pollock, 2001; Ofek and Ofek, 2003). Sparks (2005) urged that we "Celebrate progress as well as the accomplishment of your goals" (Sparks, 2005, p.205). I argue that THRPs should instruct the teachers and family of the client child so that successes in the riding arena should be celebrated again in school and at home, and successes at home and in school should be celebrated again in the riding arena. These cross celebrations serve to remind all stakeholders that the celebration of progress toward a therapeutic objective is as important as the achievement of that objective in full (Wanger, 2006, p. 19). These celebrations, found Wagner and Masde-Coaps (2002) increased the essence of community and collaboration between the school, the family and the THRPs.

Achievement and success are great motivators. The esteem others show for your successes, found Heath and Heath (2010), is a great amplifier and soon the child's report card will fill with As and Bs. Successes need to be celebrated be they small or large, public or private, individual or collective (Hall and Hord, 2006, p.193).

In their book 'Rework', Fried and Hansson (2010) argued the case for creating a Learning Organisation that creates knowledge continuously, manages it and disseminates it throughout the organisation. They found that:

> *Evolution doesn't linger on past failures; it's always building upon what worked. So should you…success gives you real ammunition. When something succeeds, you know what worked—and you can do*

> *it again. And the next time, you'll probably do it even better. Failure is not a prerequisite for success* (Fried and Hansson, 2010, p. 17).

During the time when I taught therapeutic skills to THRPs, I found that they did not mention successes. They seemed not to remember any, and only when I insisted and after I encouraged them did they reluctantly start speaking about their successes. They reported feeling guilty when talking about their successes and invariably talked about the social norms that prohibited talking about one's own successes. Tulpa (2007, p. 41) reported similar phenomena in his research and came to the conclusion that it is therefore important to encourage the telling of success stories by creating opportunities to do so. People learn when praised (Rogers, 2003), which is the essence of celebrating and acknowledging achievement of therapeutic objectives.

Earl Miller, a Professor of Neuroscience at MIT, and his colleagues found that neurons in the prefrontal cortex and the basal ganglia, areas of the brain believed to be responsible for learning, behaved differently when keeping track of successes than when keeping track of failure. Neurons in these areas were found to learn better following a recent success. When there was a failure, no change in the neural processing was observed, no learning occurred. Following an experience of success the neurons changed their pattern of response consistently showing that learning had occurred (Miller et al., 2009).

Amplification is a key word in humanistic therapy in general and in Gestalt therapy in particular:

> *The therapist looks for 'unique outcomes' – positive exceptions to the problematic story – and **amplifies** changes using letter-writing, specific audiences (others who have successfully conquered the same issue) and personal enthusiasm* (Boston, 2000, pp: 453).

When the therapist's reaction to the client's positive changes is exaggerated, this amplifies the changes and they are likely to last. Highlighting and amplifying client's past successes empower the client (de Shaser, 1988; Gurman, 2008).

2.9 Ethical Considerations that Shaped this Research

This thesis was designed to investigate learning and development processes facilitated by therapeutic horseback riding. In this kind of animal assisted therapy the client rides a horse during his therapy session or learns how to take care of a horse during horsemanship lessons.

During the past two decades questions about the ethics of using animals in therapy programmes have arisen. On the one hand, there are some animal protection groups that encourage programmes involving animal-assisted therapy. These animal protection groups place horses rescued from abusive owners in the care of farms that provide therapeutic horseback riding in order to rehabilitate the animals. The animals are placed on THR farms under condition that food and veterinary care be provided to the horse. On the other hand, there are animal protection groups that see the use of animals in therapeutic programmes as a form of exploitation and prefer to rehabilitate the horses on farms where horses do not have to work. Goldblat (2002) discusses the ethical considerations in animal-assisted therapy programmes and argues that these considerations are very important and very little was written about them. Goldblat discusses the Lannuzzi and Rowan (1991) survey that was conducted in order to collect information on the different approaches regarding the welfare of the animals that participate in therapy programmes. The survey focused on specific cases of animal treatment, which were considered questionable in order to synthesise some guidelines for the care of animals used in therapy programmes. The study also investigated the ethical issues involved in keeping companion animals.

The Lannuzzi and Rowan (1991) survey was conducted among people who participated in animal assisted therapy. The survey showed that keeping animals requires a financial and personal commitment from the owners. The animal is a partner and a member of the family. It depends on its owner for food, medical care and shelter. On the one hand there were those who claimed that the fact that the animal's survival depends on its owner is wrong because the animal cannot survive without its owner. On the other hand there were those that argued that the fact that the owner gives love and respect to the animal, treating it as a friend, makes up for it. Five criteria were indentified for what the study called a real relationship, a

positive human-animal bond. The relationship needs to be a continuous, an ongoing and sustainable relationship rather than a one-time or an of-on irregular relationship. This relationship must contribute significantly to both man and animal. The relationship must serve the needs of both parties and both the person and the animal must respect this relationship and benefit from it.

Goldblat (2002) stated that recently, there has been a marked increase in the use of animals living permanently in institutions such as prisons, homes for the elderly and psychiatric hospitals. There are a few unique dangers that these animals are exposed to. Goldblat (2002) noted that these animals could become over tired due to the continuous attention they get from large numbers of people. These animals can not rest during the day. Goldblat (2002) reported that the people caring for these animals often change and do not always have the understanding and the knowledge about animal care that the animal needs. Goldblat concluded that it was important to make sure that professional animal handlers and veterinarians will check these animals periodically physically and mentally.

Different institutions, such as hospitals and homes for the elderly invite pet owners and animal handlers to visit the institution and present aspects of their life with their pet. High school students motivated by their need to earn school credit for community involvement and service are the most common programme participants in the United States and Israel in recent years. These situations can benefit all parties if properly planned and executed. And yet some difficulties were reported when visiting animals could not drink during the visit or when the temperature at the place they visited was not suitable to them (Goldblat, 2002). There are clear benefits from these activities to all parties participating, the young students who learn the meaning of citizenship and community involvement and responsibility, the animals who receive love and attention and the elderly or hospital patients who experience belonging, I argue that such visits should be continued and be managed with sensitivity towards the needs of the animals participating. It is important to limit the duration of such visits to an hour or less and be limited to no more than three visits a week (Goldblat, 2002).

The above guidelines for treating animals that assist in therapy are applicable to the use of horses in therapeutic programmes. Riding a horse should not be allowed for

more than six consecutive sessions (30 minutes a session). A rider that will abuse a horse will not be allowed to ride again. An injured horse will not be ridden. Horses should be checked periodically by a veterinarian for its physical and mental state.

Serpell, Coppinger and Fine (2006) argued that although there are different kinds of ethical dilemmas regarding animals who assist in therapy, there are five basic welfare considerations that are common to all and they are summarised in the following 'five freedoms':

> 1. *Freedom from thirst, hunger, and malnutrition by ready access to fresh water and a diet that can maintain full health and vigor.*
>
> 2. *Freedom from discomfort by providing a suitable environment, including shelter and a comfortable resting area.*
>
> 3. *Freedom from pain, injury, and disease by prevention and/or rapid diagnosis and treatment of all ailments.*
>
> 4. *Freedom from fear and distress by ensuring conditions that avoid mental suffering.*
>
> 5. *Freedom to express most normal behaviour by providing sufficient space, proper facilities, and the company of the animal's own kind*
>
> (Serpell, Coppinger and Fine, 2006, p. 455).

In order to be able to allow the animal to have these 'five freedoms', its caregivers must identify and understand the animal's needs, including its physical, social and behavioural needs. In addition, in order that animals be allowed to participate in therapy, a balance must be struck between the satisfaction of the needs of clients and therapists and the needs of the animals.

The practitioner must care for the animal being used in therapy. When the intervention seems to be stressing the animal, it must be stopped. The practitioner must provide rest time for the animal a few times during the day. Old animals should be retired or work less according to their capabilities. No abuse of the animal should be taking place. In case of an abuse by the client, the relationship between the client and the animal should be terminated (Fine, 2010; Hallbery, 2008).

Once these ethical considerations were accepted by me, they affected my choice of THR programme that I chose for my research. Ethical considerations permeate the therapeutic climate in which my clients and I interacted and influenced the effectiveness of the programme.

2.10 Summary

This study investigated learning and growth processes facilitated in 9 year olds challenged with ADHD enrolled on a Therapeutic Horseback Riding programme. Furthermore, this study investigated the ways to maintain and transfer learning strategies and skills, acquired during the therapy, to other environments, such as family and school.

The literature review provided the theoretical ground for my research. I began with a review of the research literature in the field of Humanistic Psychology (Bitman et al, 1992; Maslow, 1967; Perls, 1978; Rogers, 1980), the therapeutic stream to which my therapeutic approach belongs. The humanistic psychology recognises the full richness of the human experience and celebrates it. It focuses on the individual's potential, stressing the importance of development, growth and self-actualisation. The cause for pathology, according to the humanistic approach, is a social environment, which prevents self-actualisation (Rogers, 1980; Bitman et al., 1992). A supportive environment, positive relationships, acceptance and love, on the other hand, contribute to mental health and to the development of a healthy personality who can reach self-actualisation (Rogers, 1980). This belief guides me in therapy, in general and in my THR practice and research in particular. During the course of THR I worked with the parents and the teachers in order to create this supportive environment, which the child needs in order to facilitate the achievement of the common therapeutic vision.

I have continued with the review of the research literature dealing with change and with how people change during therapy (Carey et al., 2007; McLeod, 2003). According to the humanistic psychology, there are six conditions which are necessary in order to produce changes in clients: the therapist-client relationship, the client's vulnerability to anxiety, the therapist's genuineness, the therapist's

unconditional positive regard, the therapist's understanding and the client's perception (Haugh and Merry, 2006). I also believe in these six conditions, which guide me in therapy.

I reviewed the research literature dealing with Animal Assisted Therapy (Crawford and Pomerinke, 2003; Levinson, 1978; May-Ron, 2005). The research literature has shown that people project on companion animals their ideas and feelings and the animal cannot deny, confirm or reject these ideas. A powerful relationship can develop between humans and animals. Children and adults reported a sense of security, being accepted and loved unconditionally, as a result of their bonding with an animal (Risley-Curties, et al., 2006). I argue that when the THRP accepts the client without criticism and judgment, the processes of change are facilitated.

The next subchapter of the Literature Review reviewed research on the Attention Deficit Hyperactive Disorder - ADHD (Barkely, 2009a; Barkely, 2009b, Brown, 2013; Greenspan and Greenspan, 2009, Vehmas and Taylor, 2004; Yishai-Karin, 2002). The clients in this research were children diagnosed having ADHD. The literature review as well as my experience with these children has shown that the main symptoms of children with ADHD can be grouped into three categories: lack of ability to focus and sustain attention, hyperactivity and impulsive behaviour. As a consequence of these symptoms these children reported great difficulties in functioning in different areas, social, educational and family. Parents and teachers need to be educated about the nature of ADHD and its effect on the child, in order to help them redesign and adjust the learning environments they create to the special needs of the child.

Next I reviewed the literature dealing with Therapeutic Horseback Riding in general and Therapeutic Horseback Riding for children challenged by ADHD, in particular (Baki, 2005; Elliott, Funderburk and Holland, 2008; Litman and Chen, 2006; Paravani, 2009; Shkedi, 2006). Therapeutic Horseback Riding has been shown to have beneficial effects on posture, muscle toning, coordination and on a range of emotional aspects of personality development and rehabilitation of the handicaped. However no conclusive results were found for children challenged by ADHD.

The research literature dealing with transfer (Brookfield, 2007; Perkins and Salomon, 1988, 1992) learning from success, (Bandura, 2011; Greenberg and

Cohen, 2012; Miller et al.; Skinner, 2002, 2011) celebrating success and amplification (Gurman, 2008; de Shaser, 1994) were also reviewed. These researchers contributed most significantly to the crystallisation of the KTR model of THR. The facilitation of the transfer of skills and learning strategies learned during THR to parallel learning environments at home and in school was adopted as a measure of the effectiveness of THR and the Manual instructed THRPs in how to maximise the transfer process.

The THR processes who were focused on successes and the celebration of these successes amplified the THR learning processes and facilitated the transfer of the skills and learning strategies learned during THR to the home and school environments.

At the end of the chapter I have raised some ethical considerations that shaped the research. The research that I have reviewed does not concern itself with ethical criteria that apply to the horses and to the farms on which THR programmes are run. In this respect, by adopting the Serpell, Coppinger and Fine (2006) and Goldblat (2002) ethical criteria, this research pioneered a new approach to THR and THR research.

In the next chapter I will review the methodology of this study. My epistemology and ontology will be presented. Appropriate methodological approaches are discussed and the research design is presented. I will review the research tools used in this research and data analysis will be discussed.

Chapter 3

Methodology

3.0 Methodology

3.1 The Research Methodology:

This chapter reports on the research method used, the participants, the research setting and procedure and the ethical issues that I confronted.

My research focused on three cases of children (clients) challenged by ADHD (Attention Deficit Hyperactive Disorder, as explained in the Literature Review) that participated in a Therapeutic Horseback Riding (THR) programme aimed at developing the learning skills and strategies needed to impact the client's therapeutic objectives. Each case included multiple serial observations, interviews, narratives and questionnaires. Various methods of data collection were employed; they ranged from data collected from the school, the family and the client to the THR professional.

The overall paradigm that I chose and that seemed to me a 'best fit' for my research was the naturalistic, constructivist interpretive qualitative approach to research (Denzin and Lincoln, 2005; Shkedi, 2007).

When we speak about a research approach we speak about a strategy, anchored in the field by a system of related assumptions, which are philosophical and ideological in nature (Sabar Ben-Yehushua, 1995). For example one such assumption is that reality is individually constructed, as is the truth that this research is trying to discover. A paradigm is a world point of view, a comprehensive, in depth perspective on the processes being studied. A paradigm explains the process being studied by simplifying and looking inside the specific details available for inspection (Lincoln and Guba, 1985; Guba and Lincoln, 1994 and Denzin and Lincoln, 2005). The research paradigm reflects on a wide range of assumptions, which relate to each other, and are based on the characteristics of the reality, which is being constructed. This is a unique point of view of the world, a frame of reference that permits the researcher to make meaning of his experiences in the research field (Maykut and Morehouse, 1994).

It is essential for a beginning researcher, like myself, to consider in depth the philosophy behind quantitative and qualitative research before deciding on the research philosophy that best fits the research objectives (Maykut and Morehouse, 1994; Nachmias and Nachmias, 1998; Sabar Ben-Yehushoa, 1995 and Shkedi, 2007). Before deciding on the research paradigm, I considered in depth the philosophies behind both major paradigms, the quantitative and the qualitative research paradigms.

My epistemology, the way in which I constructed my knowledge (Bengson and Moffett, 2011), is firmly rooted in humanistic philosophy. I believe that my clients are unique, bringing with them to the therapy session a wealth of different experiences and abilities. Each client has different learning skills and strategies. Each horseback riding therapy session has to be adapted to the client so that he could use to his advantage his existing learning skills and strategies and the new learning skills and strategies acquired during the THR programme. Because of my epistemological positioning within the qualitative paradigm, I examined both paradigms carefully in order to avoid a superficial decision. Both approaches contribute to the search for truth and can explain meaningfully our observations of the world we live in.

The quantitative approach is a positivistic one, which assumes a single discoverable truth, exists (Denzin and Lincoln, 2000). This truth is believed to be objective and measurable. As such quantitative research will try to confirm or contradict assumptions about the behaviour of variables, to find a relationship between variables and to present facts. Quantitative studies emphasise the measurement and analysis of causal relationships between variables, and not processes. Auguste Comte first used the word ‘positivism’ in 1830, as synonymous with science or with positive or observable facts. The positivist approach holds that science should be primarily concerned with the prediction of events based on existing theory and the explanation of events and proofing of the causes of observable events (Maykut and Morehouse, 1994).

In contrast **qualitative research** emphasises qualities of entities, processes and meanings that are not necessarily experimentally examined or measured in terms of

quantity and/or amount (Denzin and Lincoln, 2000). Qualitative researchers believe that reality is subjective and stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied and the situational constraints that shape and guide inquiry. They seek answers about **how** social experience is created and about its meaning. Such researchers emphasise the value-laden nature of inquiry into processes whereas the quantitative researchers claim that their work is done from within a value-free framework, a laboratory, where extraneous variables are being controlled (Denzin and Lincoln, 2000).

Quantitative research is deductive. It starts with a theory and hypothesises the relationship between variables that can be deduced from the theory. Quantitative research is an empirical test of one or more theories. Data is collected and analysed to prove or disprove the hypothesised relationship or prediction and in order to test the generalisability of the study's findings to the general population.

Qualitative research, however, is inductive. It starts with the posing of research questions and with the collection of data. Following the analysis of the data, theories are formulated in order to explain the process studied. The focus is on discovering and examining processes and phenomena that are part of the individual experience. The qualitative-constructivist research is characterised by its holistic approach to processes and phenomena (Stake, 1995). Clandinin and Connely (2000) also state that the qualitative-naturalistic paradigm achieves a holistic understanding of phenomena by inspecting processes, mutual relationships, interactions and their significance (Clandinin and Connely, 2000).

Researchers who use qualitative-constructivist methodologies wish to understand processes and phenomena and situations as holistic entities (Henwood, 1996; Lincoln and Guba, 1985; Rist, 1982). While the researchers who support the positivistic approach argue that its basic assumptions enable them to present the phenomena they are researching by disassembling it to several discrete component parts which are different from each other, the constructivist approach demands presenting the researched phenomena or process as one undivided unit where all its parts are connected together. The constructivist approach sees the world as a complex system where individuals have mutual relationships, which affect one another. This world can be viewed from different perspectives (McLoed, 2011).

McLoed (2011) argues that:

> *The primary aim of qualitative research is to develop an understanding of how the social world is constructed. Qualitative research starts with language and meaning, and can reach out into the domain of numbers and 'variables'* (McLeod, 2011, p.3).

It was clear to me that in my research I was looking for processes and ways in which these processes might develop and interact with the field and with each other, thus the qualitative approach was the 'best fit' for me. My research is naturalistic, inductive and qualitative. It is **not** positivistic, deductive and quantitative, since the positivistic approach is not well suited for the study of processes and their interactive development (Connelly and Clandinin, 2006; McLeod, 2011).

3.2 An Evolving Methodology:

My research design evolved into a piece of action research (Hacohen and Zimran, 1999). When first planned I had thought of my research as an applied research using grounded theory as a method of data analysis, serving the needs of practitioners (teachers, neurologists, psychologists/social workers, therapists and horseback riding therapists), the needs of parents and those of children challenged with ADHD. The grounded theory methodology (Glaser and Strauss, 1967), which was developed by Glaser and Strauss (1967) is a methodology focused on the construction of theory through the analysis of data. This research focused on the discovery of processes elicited by the KTR Model and the answering of the research questions, and therefore a different method of data analysis was needed. The research evolved into the examination of my practice for the purpose of improving it and the data analysis strategy evolved into inductive content analysis.

My research design went through many changes. When I was planning my research I did not aim it to be action research grounded in my own practice. I was planning to offer my ideas of how to plan and deliver THR sessions to THR practitioners (THRPs). I planned to supervise and guide the THRPs in their effort to plan the THR sessions, to facilitate the learning of skills and strategies, and to facilitate the transfer of skills learned in the arena to the home and to the school, and help them create opportunities for the amplification of the learned skills. The THRPs listened

to what I had to offer them, but they were not willing to participate at that time. Some of them feared that adopting the proposed model of THR would be too much work for them; others suggested that I should first conduct my research and if it really worked, then they would be willing to learn and apply my THR model.

It was at this point in my research that I decided to seek certification as a horseback riding instructor and as a therapeutic horseback riding instructor in order to develop my own practice as a therapeutic horseback riding practitioner. As a result of my decision, I invested two years in learning to become a therapeutic horseback riding practitioner. As I have mentioned before, I have been riding horses almost all my life, I love horses and I am a therapist for more than twenty years. The decision to become a certified THRP seemed to focus me and my plan of action crystallised. For two years I observed therapeutic horseback riding practitioners' sessions. The THR sessions were therapeutic in name only. THRPs were trained to teach horseback riding for sport and had received no training in therapy with or without the assistance of horses. I offered to teach therapeutic skills at the school where I was studying to gain my qualifications as a THR instructor. I taught therapeutic skills to my classmates and later on to other classes. I knew that therapeutic skills are essential to THR and to any therapy. I also knew that my skills as a practicing therapist for so many years would aid me in my new profession as a Therapeutic Horseback Riding practitioner.

3.3 Action Research:

Sagor (2000), defines Action Research as:

> *...a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the "actor" in improving and/or refining his or her actions* (Sagor, 2000, p.3).

Action research then is an empowering experience for the researcher. It is always relevant to the researcher and helps him or her to be more effective in what they do. Action research is dynamic and circular starting with identifying a problem in order to make a change and improve the educational activity. It ends with the results of the planned action and the identification of a new problem. Action research is a type

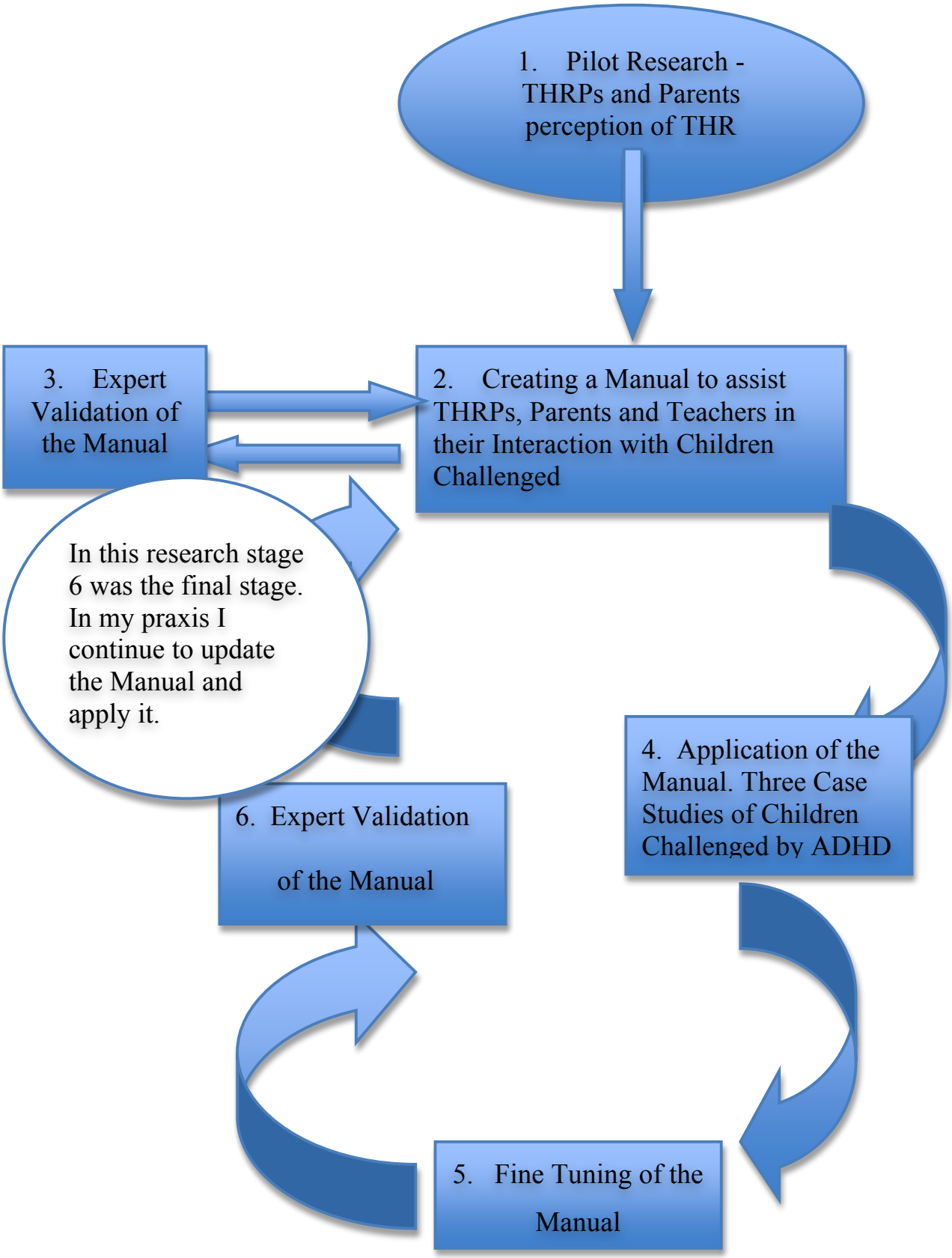
of self-research and reflection. The researcher is the main research tool and is directly involved in the research and its procedures. Educational action research is being done by and for those who act in the field of education in order to focus on their reality by asking question like ‘what do I do?’ or ‘what has happened?’ and ‘what do I need to do?’ (McNiff, 2002; Sagor, 2000).

McNiff (2002) argues that Action research always involves the same process: selecting a focus, clarifying theories through literature review, identifying the research question or questions, choosing research tools, planning the intervention, carrying out the planned intervention, collecting data, analysing the data, reporting results and taking informed action (McNiff, 2002). In the current research the following six stages of Action Research emerged:

Figure 1 shows the six stages of the Action research Cycle research:

Figure 1:

The Six Stages of the Action Researrch Cycle



3.4 The Pilot Study Stage:

The pilot study included interviews and observations of ten THRPs conducting THR sessions and interviews with ten parents of THR clients. The pilot study was conducted on four horse farms that had significant THR programmes and met ethical and safety criteria. The parents were asked to state their perceptions of how effective the THR sessions were and what their children gained from these sessions. The THRPs were asked about their perception of THR sessions. The observations were conducted during the THR sessions in which the children of the parents that were interviewed participated and which were conducted by the THRPs interviewed.

3.4.1. The Observations:

Additional data was collected during the pilot stage of the research with the help of non-participatory semi-structured observations.

From the analysis of the interviews conducted with the parent and the THRPs several reoccurring themes emerged. These themes were used in the construction of the observation protocol.

The themes that emerged from the interviews with the parents were: calmness (no anger outbursts), follows instructions (cooperates with THRP), focused (not distracted, in control), organised (comes to THR with all of his equipment, puts on safety equipment prior to lesson and organises himself on the horse) and concentration (during tasks). Parents also spoke of the child being happy and self-confident. These last themes were not included in the observation protocol.

An observation protocol (Appendix B, Pilot Research, p. 273) was generated using these themes and three observations were conducted during each thirty (30) minute THR session: 7 minutes into the session, 15 minutes after the child mounted the horse and 25 minutes after the child mounted. The timing of the observations was dictated by the rhythm of the THR sessions: at the beginning of the session and after the THRP had completed all saddle and tack adjustments and the ‘client had found his seat’ on the horse; midway through the session; and, at the end of the 30 minute session when the session is winding down.

The themes that emerged from the analysis of the data collected during interviews with THRPs were: The importance of creating a positive relationship with the client (child), a positive interaction (positive feedback, respect, positive environment), and the role of the horse. The category 'creating a positive relationship with the client' was included in the observation protocol.

The observation protocol was validated against the symptoms of ADHD listed in the DSM-IV-R (2000) and the criteria of effective therapy conditions proposed by the Humanistic Psychology (Rogers, 1957; Haugh and Merry, 2006).

3.4.2 Interviews:

The main research tool used during the pilot study was the interview. Consenting parents and THRPs working with the children of the parents interviewed were asked to share their experience with THR.

Parents were encouraged to share their narrative regarding THR and speak about their children's coping with the challenges created by ADHD.

THRPs were asked to share with me their experience with children diagnosed with ADHD and their narrative regarding the practice of THR.

3.5 The Manual Stage:

During the manual stage, a manual was produced to expose THRPs to the KTR model and guide THRPs through the creation of a common therapeutic vision and consensus around the therapeutic objectives. The manual guides THRPs through the steps of planning THR sessions and the building of outside support for gains made in the arena. The manual instruct THRPs in the skills of facilitation of transfer of skills and learning strategies to parallel learning environments and the professional tracking of gains made toward the realisation of therapeutic objectives. The manual guides THRPs when adjustments become necessary when the evaluative data shows that progress is slow or even in regression.

3.6 The Expert Validation Stage:

During this stage (third stage) three expert THRPs were shown the manual and feedback was solicited. I chose the expert THRPs from among the staff of THRP

certification courses who had more than ten years of experience in practice. As a matter of convenience and availability I chose THRP experts that were staff members of THR farms in the north of the country. In this manner a short list of six THR experts was formed. Only three of the experts agreed to participate. The sessions with the THRP experts were individual and required two meetings each of one hour. During the first meeting the experts were shown the manual and were asked to evaluate it based on three questions: (1) what themes were addressed by the manual and needed additional attention and in what areas? (2) what themes that were not addressed by the manual needed to be addressed? and (3) what themes did the manual address unnecessarily? As answers were given I requested examples that illustrated the importance of the point the experts made. The answers were collected in a table (table 2, p.141). My own associative reflection was added to the table and the data was acted upon (the action was recorded in table 3, p.141). At the second meeting summative tables were presented and gone over till consensus was reached about the corrective action to be taken. The manual was then completed and printed.

3.7 The Application Stage:

During the application stage it was necessary to reach decisions regarding the choice of THR farm and THR programme I would work with, the choice of horse and the choice of participants. Choices were made in accordance to a set of criteria chosen prior to beginning the application stage.

The design of the application stage was based on multiple case studies. Each case study represented a self-contained unit of measurement. Within each unit repeated measurements were made over time. Within each case, data was collected from four sources with various research tools.

The research tools were: an Intake Questionnaire and Interview, the ADHD Inventory Questionnaire (ADHD-IQ), a Self-Esteem Questionnaire (SEQ), a Weekly Parent Report, the child Weekly Success Report, a Teacher Report, a Research Diary and grades and other school reports.

The Intake Questionnaire and Interview were administered only once during the first meeting with the client and accompanying parent(s). The ADHD Inventory Questionnaire is a before and after measure as is the Self-Esteem Questionnaire.

Similarly, grades and school reports were collected before and after treatment. The Weekly Parent's Report, the Child's Weekly Success Report and the THRP Research Diary were repeated measures that were collected weekly. For example, if a child had 30 sessions, then 30 'Weekly Parent's Reports' were collected. The Teachers were asked to complete 'The Teacher's Periodic Report' before the THR sessions started and around session fifteen.

Analysis of the data within each case was continuous and the results informed the planning and adjustment of the sessions.

Once the Intake Questionnaire and Interview, ADHD-IQ and SEQ questionnaires (the ADHD Inventory Questionnaire and the Self-Esteem Questionnaire) were completed a common therapeutic vision and the therapeutic objectives were agreed upon and recorded. The therapeutic vision and objectives led the THR process.

During the creation of the common therapeutic vision, the client was asked a set of questions based on the data collected with the help of the Intake Questionnaire and Interview. The questions were designed to explore the client's awareness of his symptomatic behaviour and its consequences at home and in school.

Table 1: Examples of Intake questionnaire and Interview questions:

1. What is the skill that you would like to learn during THR that could help you the most?	2. …at home?	3. …in school?
4. If you were to master this skill how will your life improve?	5. … at home?	6. …in school?
7. If you will successfully master this skill, who would be the first to notice it?	8. …at home?	9. …in school?
10. You gave this skill the value of 10, do you feel that this skill should be on top of the list?	11. Is this the opinion of your parents as well?	12. Is this the opinion of your teachers in school as well?

Once it became clear that the skill chosen was a skill the client and his parents and teachers could agree on and thus a very important skill to all stakeholders, it was set as an operational therapeutic objective and another part of the therapeutic vision was contemplated.

This procedure was repeated until a clear common therapeutic vision emerged and the therapeutic objectives were operationalised.

3.8 The Manual Fine-Tuning Stage:

The data collected during the application stage of the research was analysed immediately following collection. For that purpose the data collected with the help of the Weekly Parent Report and the Periodical Teacher Report were tabled to follow the client's progress during THR. These data were crosschecked with data from the Research Diary and from the Weekly Success Report. In most cases it confirmed the THR principles and method that make up the KTR model of THR that formed the basis for the manual. Some of the findings suggested the need to rewrite and reformulate some of the manual sections. Once all the data was collected changes were made in the manual, where necessary, to better reflect the study's findings.

3.9 The Expert Validation of the Manual:

In the last stage of this research, the study's findings, conclusions and theoretical formulations were tested for external validity by using three THR experts, two from Israel and one from Belgium. This process involved the sending to each one of these experts the study's conclusions and the data supporting these conclusions through the use of the Internet. The experts that were selected worked independently and their identity was concealed from one another.

The THR experts that participated in this process were chosen from two sources. The first source was a list of THR experts that had participated at the international XIV Congress of Therapeutic Horseback Riding held in Athens, Greece during the month of April 2012, who spoke English and were interested in research concerning THR. The second source was from the available ranks of THR programme heads in Israel, who had years of experience in the field.

3.10 The Research Processes and Design:

This research was carried out in six stages. Following the conducting of an extensive literature survey I completed a pilot research study among THR practitioners and parents of children challenged by ADHD, who were enrolled in

THR programmes. The exploratory pilot study, stage one, was conducted on four horseback riding farms that maintained vigorous THR programmes (PH, HS, Y and EZ) and was designed to inform the decisions that needed to be made during the second stage of the research, the design of the '***THR Manual for Children Challenged by ADHD' – The KTR Model (Knowing Therapeutic Riding Model). KTR in Hebrew means 'crown' and the name seemed to fit the manual***. Ten THRPs and ten parents of children diagnosed with ADHD aged between 9 and 12 years of age were interviewed. The THRPs were asked to evaluate their own THR practice and the parents were asked to present their perspectives of their children's experience with THR.

The results of the exploratory interviews were used, during the second stage of the study, to design the THR Manual for THR practitioners working with clients challenged by ADHD, and helped to crystallise the KTR model. No THR manual for the use of THRPs existed prior to the compilation of this manual. The manual combines practice and theory and can be used by both practitioners and educators. Following the completion of the manual, the manual was presented to three THR experts for expert validation. Therapeutic horseback riding practitioners with at least ten years of experience read the manual and provided feedback.

The sampling procedure for the manual application stage was conducted in two steps. Horse farm EZ was chosen as the farm whose programme was most consistent with the KTR model and who could best provide the cases needed for the research. This decision was made based on projected availability of clients challenged by ADHD in the 9-12 age group. EZ farm received the highest score on the criteria ranking of all horseback riding farms. The level of cooperation I enjoyed during my research was also very high. The farm owners and the working team were extremely cooperative and excited to participate in the research. Clients were screened first by the main office where they received a summary explanation of the therapeutic programmes available to them, one of which was the research programme conducted by me. The first explanation of the experimental THR programme was given to the parent on the phone or face to face by the owner of the EZ farm during their first encounter. Once a client had chosen to participate in the programme that I headed, a meeting with me was arranged. During the course of

one year six such clients were identified and gave their agreement to participate in the research. Of the six cases only three completed 30 sessions, the amount of sessions I had set as a minimum for the research. Two other cases completed 10 sessions each and left the programme. One case left after receiving 7 sessions.

During these sessions I worked on the agreed upon therapeutic goals and the ability of my client to transfer newly learned skills and learning strategies to outside learning environments, was facilitated. Evidence of transfer in the form of success stories from the school and home environments was collected weekly at the beginning of each session and celebrated. The celebration of each evidence of transfer and success served to amplify transferred skills and strategies learned in the riding arena to the two other environments, the home and the school. Data was collected and analysed regarding learning and developmental processes with which the client engaged during THR. From the analysis of the data the THR practitioner can learn how to adjust the session and the focus on learning skills and strategies is fine tuned to the growth and development curve of each client. The research findings were used to further refine the Manual of THR practice.

This application stage took place for over a year. Once the parent(s) and child agreed to participate in the research, they were given my phone number for an appointment.

3.11 Sampling Strategy for Each Stage:

My research was conducted in six stages. Two of the stages (2 and 5) were 'arm chair' stages that required no participants. My main work during these two stages was reflection on my praxis and synthesis. The participants for stages 1, 3, 4 and 6 were chosen on the basis of their willingness to participate in the research.

In stage one, the pilot research, participants were ten Therapeutic Horseback Riding Practitioners (THRPs) and ten parents to children diagnosed having ADHD who participated in the THR programmes that were researched. The THRPs and the parents were chosen from four different THR programmes. These THR programmes were chosen from among fifteen farms operating THR programmes in the North of the country, that I evaluated against the following criteria: safety, employing only certified instructors and carrying professional insurance.

Stage two was the stage during which I built the manual using the findings the pilot research generated. This stage had no participants.

Stage three, was the 'Expert Validation of the Manual' stage. Three experts were chosen from among a short list of ten expert THRP candidates. The experts comprising the short list were known to me from different professional activities such as participation and contribution to THR conventions and workshops. The criteria I used in choosing the three experts were: that they were certified THRPs, had at least ten years of THR experience, and were not working for the THR programmes that I had researched during the Pilot stage of this study.

Stage four was the Application of the Manual stage. During this stage three cases of children diagnosed with ADHD completed 30 sessions of THR according to the KTR model. For this stage I needed to choose the farm in which to conduct my research, the children and their parents and the right horses. The EZ ranch was chosen by me for the research and application of the Manual in THR conducted with children challenged by ADHD. I chose EZ ranch because it met the criteria I had chosen to guide me in my decision. EZ ranch had the right horses, the right equipment, the insurances needed and it was close to my home. Today, three years after I finished my research I am continuing my work there. There were several criteria that I used for choosing the horses for my THR programme. The first and the most important criterion was that the horse was not aggressive. The history of the horse was examined and horses with a history of biting or bucking or kicking were not used. The second criterion was the size of the horse. I chose horses that were not too big or not too small (ponies) for the child. The horse had to be of a comfortable size for a 9-12 year-old child. The third criterion was a well-tempered horse. In this category horses were judged for willingness to follow instructions and calmness during mounting and dismounting procedures. In addition I rode each horse prior to the session to make sure that the horse was ready for the session and not suffering from any injury or illness.

My research was conducted on Sundays, which is a working day in Israel and children are in school during the morning hours and can come to the ranch during the afternoon. I was looking for children diagnosed as having ADHD who were 9 to 12 years of age, had not participated in THR before they came to EZ ranch and who

were willing to come on Sunday afternoon and participate in the research. Among the ten children I have interviewed, four of them could not participate on Sundays. I started my research with six children. One of the children dropped out of the programme after 7 sessions and two additional children dropped out of the THR programme after 10 sessions. Three children dropped out of the programme before completing it due to economical difficulties and partly due to the fact that the major medical policy was not willing to subsidise the cost of the sessions.

Stage five, the 'Manual Fine-Tuning' stage, had no participants.

Stage six was the 'Expert Validation of the Manual' stage. Three experts were chosen, two from Israel and one from Belgium. All three experts participated at the international Congress of Therapeutic Horseback Riding held in Athens, Greece, during the month of April 2012, where I have presented my research. These experts spoke English and were interested in research concerning THR. The two Israeli experts, were the heads of THR programmes in Israel. The Belgian expert was the head of a THR programme on her own farm. All three experts had more than twenty years of experience in the field. These three experts were chosen from among hundreds of participants representing THRPs from most countries in the world.

In choosing these experts I was guided by Shkedi who proposed a purposeful sampling procedure (not random) for qualitative research focused on choosing informers which represent in the best possible way the population of expert practitioners from which they were chosen (Mason, 1996; Shkedi, 2007). These experts had the capability to teach us about the phenomena being studied and they were willing to participate in the research

3.11.1 The Sampling Procedure in detail:

During the first stage, the research interviews and observations were used to examine learning processes elicited during THR and the relevance of these processes to the goals of THR programmes for children challenged by ADHD. I conducted a search by visiting horse farms that had a therapeutic horseback riding programme, with the intention of choosing programmes in the north of the country that would be willing to participate in the research. Three criteria were used in the identification and choice of these therapeutic horseback riding programmes: were

they meeting safety criteria, were they employing only certified instructors and were they carrying professional insurance. The safety criterion required that the farm employ safety criteria with regard to their horses, riding equipment, riding arena, training and maintaining high standards of horse training and rider behaviour and clean and safe stables. On most of the farms visited the sand in the arena was not deep enough (the minimal depth required being 5 cm), the terrain was not level and even, the fences were not well maintained: helmets worn by students were ill fitting and some saddles were worn and could tear at any time.

The second criterion, requiring that all THRPs be certified instructors, meant that THRPs had completed successfully THR and horseback riding instructor courses, were examined by experts and were certified accordingly. On many of the farms visited, the instructors working in the THR programmes had not passed their exams and were not certified. Some had taken the THR exams over and over without success. The criterion requiring the farm to carry professional insurance was used in the selection process because it implied that certification and safety were periodically audited by outside governmental agencies and that these agencies inspected diligently all the programmes based on a set of national standards. A convenience sampling procedure was used. Convenience sampling is one of a number of non-probability sampling techniques (Babbie, 2001). This sampling procedure led to the selection of four horseback riding farms based, in the first instance, on their convenient accessibility and proximity to me (Babbie, 2001), and on the three professional criteria, mentioned above, that I had decided upon.

After visiting 15 different horseback riding farms with strong THR programmes, I came to the conclusion that only four met the criteria I had set for choosing THR programmes. Once the farms were chosen, I assigned each of the chosen farms to an interview date. On the day assigned I interviewed THRPs that were working with diagnosed ADHD clients and the parents that were accompanying those clients. The observations were of THR sessions conducted by the senior THRPs interviewed. A senior THRP was considered a THRP with five or more years of THR experience.

During the third stage (Expert validation of Manual) of the research three THR experts were chosen to independently evaluate the manual using the following three questions:

1. What themes were addressed by the manual and needed additional attention and in what areas?
2. What themes that were not addressed by the manual needed to be addressed?
3. What themes did the manual address unnecessarily?

The first expert, “S”, was a certified THR and horseback riding instructor. She has more than 10 years of experience in the field and has worked with children challenged by learning disabilities, autism, cp, retardation and ptsd (post traumatic stress disorder).

“Y”, the second expert, was a certified THR and riding instructor with more than 20 years of experience in the field. She manages an important THR programme and is the head THR instructor on two farms with strong THR programmes.

The third expert, “J”, had more than 20 years of experience in the field and knows well THR programmes in England and the USA where she has worked. She is currently the manager of a THR programme, conducts research and publishes in the field.

The sampling-procedure during the fourth stage of the research combined several approaches. Families of children diagnosed with ADHD that chose THR as a treatment for their child and chose the EZ programme, were offered the opportunity to participate in the research if the client was 9-12 years old. The manual was applied in 6 cases of children aged nine to twelve years of age. The reason for choosing this range of age was that in this stage of the development of the children’s cognitive processes, the processes become logical, more rational, mature, more ‘operational’ and ‘adult like’. Children are less egocentric and are more aware of external events and see things from different points of view and are able to organise their thoughts in a logical way. Piaget (in McLeod, 2010) is calling this stage of development the “Concrete Stage” (age 7 to 12). Erikson (1950) called this stage of development, from 6 to 12 years of age, the stage of Competence when the Psycho Social Crisis is Industry vs. Inferiority. At that stage according to Erikson (1950), children have the need to win approval from their parents and teachers and their peer group. They demonstrate competences in order to get the approval they need. In addition children begin to develop a sense of worth and pride in their accomplishments.

In addition to the age group criteria that served as a first line of screening criteria, the farm's front office informed potential clients that they were expected to attend 30 consecutive weekly THR sessions on a given day of the week. Only those clients and their families that had no prior THR experience and that committed to the programme proceeded to the intake stage. I chose six cases of children diagnosed with ADHD with roughly equivalent treatment histories belonging to the same age group. Of those clients that were eligible to participate two could not join. The parents of one could not commit to a programme that required 30 consecutive sessions and the parents of the other could not commit to the day of treatment.

The parents of the clients that were willing to join the THR programme were interviewed (Appendix A, pp. 271- 273) and asked about their relationship with their child and his behaviour at home. During the duration of the THR programme parents were asked to report weekly on how their relationship with the child and the child's behaviour at home evolved over time. The home classroom teachers of these children were interviewed twice about the child's accomplishments in the school environment and his development according to criteria generated by the child's therapeutic plan. During the second interview following session 10, the home classroom teachers were specifically asked about the changes they had noticed regarding the client's therapeutic objectives.

3.12 The Case Study Framework:

A case study is an in-depth investigation of a single individual, incident, group or community, a school, an organisation, a city, an intervention or even a nation (Shepard and Greene, 2003; Willig, 2004; Yin, 2009). A case study is an approach to the study being conducted, which may involve the use of a wide and diverse range of methods of collecting data and of their analysis. A case study is characterised by its focus, which is upon a particular unit of analysis: The case.

The unit of analysis of this research is a child diagnosed with ADHD enrolled in the THR programme I offered, his parent(s) and his homeroom teacher.

The research design was planned to include six (6) cases. The observations of the progress and development of the processes being studied were multiple and repeated over time.

It is important to understand the defining features of case study research. Willig (2004) brings five important defining features of case study research. The most important is the researcher's perspective, which is an **idiographic perspective.** The researcher is

> …concerned with the particular rather than the general. The aim is to understand an individual case, in its particularity (Willig, 2004, p. 70).

It is an in depth multi dimensional look at processes developing within the boundaries of the case study (Mills, Durepos and Wiebe, 2010). The current study explored the experiences of children challenged by ADHD within the framework of a THR programme they had enrolled in. Within that framework the processes of learning new learning skills and strengthening existing skills, and adopting new learning strategies were facilitated. My clients learned how to celebrate successes and their parents and teachers learned how to celebrate with them and support the celebration. My clients developed a positive outlook on life in general and on aspects of growth and development in particular within the sustainable common therapeutic visions and showed positive gains on observable components of self-esteem.

The second defining feature of a case study according to Willig (2004) is the researcher's **attention to contextual data**, meaning that the researcher pays close attention to the different *"ways in which the various dimensions of the case relate to or interact with its environment"* (Willig, 2004, p. 71). The case cannot be considered in isolation but as part of its environment. In the current study a Case Management approach was used which involved the collaboration of the child, the parents, the teacher(s) and the case manager. The child could not be considered in isolation, but as part of his environment. This thesis is about the transfer of skills learned by children challenged by ADHD during therapeutic horseback riding sessions to other learning environments within the boundaries of the case, such as the house and the school. In order for the transfer of skills to take place,

collaboration and coordination between parents, the teacher and the therapeutic horseback practitioner are essential and must be elicited and managed by the THRP. In order for a child challenged by ADHD to develop and progress as a whole and grow into a fulfilled human being, he/she needs intensive support; emotional and scholastic support as well, throughout his/her development.

The third defining feature according to Willig (2004) relates to **triangulation** between the diverse sources of data collection, thus enabling an in-depth understanding of the processes being researched. In the current study in-depth interviews, observations, weekly reports, records and a research diary were used in the process of triangulation. **A temporal element** is the fourth defining feature of the case study, which relates to the involvement of the case study in an investigation of *"occurrences over a period of time"* (Willig, 2004, p. 71). The focus is on the process of change and development. In the current study a process of change was investigated over a period of thirty consecutive sessions, a session per week. The change and growth of the child during the THR sessions as well as at home and in the school were monitored.

The fifth defining feature of a case study is its **concern with theory.** Willig (2004) states that the case study design facilitates theory generation. *"All theories are initially based on a particular case or object"* (Hamel, 1993, p. 29). Researchers like Willig (2004) and Yin (2009) felt that this approach is especially useful when patterns are analysed in order to provide explanations for processes being studied. The central paradigm in my research is a multiple case study with elements of time series. I found the analysis and pattern matching to be especially effective in testing existing theory and formulating new theory.

The case study design was used in the current study to collect data about learning processes taking place during THR sessions, the transfer of skills and learning strategies acquired or reaffirmed during THR and their amplification. The research design involved a Multiple Case Study in which originally six children diagnosed with ADHD were investigated. Three children dropped out of the programme before completing it due to economical difficulties and partly due to the fact that the major medical policy was not willing to subsidise the cost of the sessions. The regulations that governed the major medical insurers' willingness to subsidise the

cost of THR sessions limited the number of subsidised sessions to 30 a year. However, the 30 sessions that were subsidised included sessions with psychologists or other therapists that the parents availed themselves of prior to engaging with the THR programme. Two of the children who dropped out of the programme completed ten sessions each. A third child completed only seven sessions before leaving the THR programme.

3.12.1 The synthesis of the Action Research and Case Study Paradigms

This study was designed as a six-stage action research. Stage four of this action research was designed to incorporate the features of a multiple case study paradigm. The design decision was made on methodological grounds, which are reviewed bellow.

3.12.1.1 The Action Research Paradigm

The action research paradigm was discussed in detail in Chapter 3.3 above. Action research is a particular case of applied research (Hacohen and Zimran, 1999). It is particularly well suited to the field of social change through education (Elliot, 1991), health care (Koch and Kralik, 2006), social work (Healey, 2001), organisational development (Argyris and Schon, 1991) and psychology (Willig, 2001).

Action Research creates the framework in which it becomes possible for theory and practice to inform each other (Blichfeldt and Anderson, 2006; Molineux and Haslett, 2002). In this research therapeutic humanistic theory informed the practice of therapeutic horseback riding and the therapeutic horseback riding practice informs therapeutic humanistic theory. Researchers have reported that all participants experience a transformational, emancipatory process of change (Argyris and Schon, 1978; Peters and Robinson, 1984). Such a change, if it occurs can lead to the emancipation of THR clients, parents and teachers that engage with the programme.

It is for this reason that I chose the action research as the over-arching paradigm of this study. In the riding arena, the home and in the class-room the dynamics as well as the learning infrastructures change and with them perceptions and social forces reach a new balance (Eden and Huxham, 1996), a balance that can set the child

(client) free and radically improve the quality of life of the child, his parents and the teacher.

Following are some of the characteristics of action research. When conducting research I will be an active participant. My presence in the field will be prescriptive (I will be conducting THR sessions, will be choosing the horse and will be facilitating the learning process) and intervening (will be guiding parents and teacher). During the THR sessions I will be focusing mostly on the "How to?" since I will constantly be facilitating the framing and celebration of success stories, will be facilitating the transfer of learning outcomes, will be facilitating the amplification process of the value of skills and strategies learned during THR and will be tracking progressive or regressive steps made towards the therapeutic objectives.

3.12.1.2 The Case Study Paradigm

The case study paradigm is quite different. It was discussed in detail in Chapter 3.7 above. Case study research can be of a single case or of multiple cases (Yin, 2003). Miles and Huberman (1994) suggested that multiple case study research designs could increase the methodological rigor of the study as they provide the opportunity for both within cases and between cases triangulation of findings. The triangulation of findings between cases is held by Miles and Huberman (1994, pp 29) and Yin (2003) to provide the researcher with a measure of precision of the observations conducted and it allows us to evaluate the internal validity of our findings. Yin (2003) was of the opinion that multiple case studies were more likely to impact practice than single case studies regardless of the setting and importance of the findings. Yin (2003), addressing the issue of external validity, added that multiple case studies are better suited for analytical generalisation of *"a particular set of results to some broader theory"* (Yin, 2003, p. 36). This study set as one of its major goals to contribute to the theory and practice of THR and investigate its effectiveness.

Following are some characteristics of the interpretivist case study design. During research the researcher is expected to observe from a position of objective detachment (Yin, 2003). My research did not permit me to assume such a role. I was a participant observer implementing an agenda, a position that provided me with

valuable insights regarding the development and growth of the processes studied. This position, however, potentially cost me some of the objectivity I tried to maintain, objectivity I tried to recover by designing research tools and research procedures that could contribute to its maintenance.

An additional characteristic of the case study design is it's focus on the collection of descriptive and explanatory data (Yin, 2003). The data that I searched for was descriptive and explanatory of the processes studied and of the contribution of the THRP as a facilitator to their growth and development. The role of the client in his therapy grew to the point where he made choices of horse and session content. All participants moved from being descriptive to being explanatory (reflective) and action oriented (evaluating movement towards or away from therapeutic objectives). More on these development can be found in Chapters 4 and 5.

Case studies are also known for their ability to maintain their focus on 'How to?" and "Why?" questions (Yin, 2003; Vreede, 1995). In this study I was concerned with 'how to' frame and celebrate my client's success stories, 'how to' facilitate the transfer of learning outcomes created during therapy to the parallel worlds outside the riding arena, and 'how to' facilitate the processes leading to the amplification of the value of skills and strategies learned during therapy. In this study data was collected documenting the forward movement clients made while achieving their therapeutic objectives as well as data evidencing regressive steps made away from the therapeutic objectives they set for themselves. This data was concerned also with the 'why' questions that shaped needed adjustments to the therapy sessions in order to sustain whatever forward movement was made by the client toward the realisation of his therapeutic objectives.

3.12.1.3 The synthesis

Benbasat et al. (1987) and Galliers (1991) argued that action research is a special case of case study research while others, such as Vreede (1995) chose to emphasise the differences between the two paradigms and argued that they should be kept separate. I argue that there is a need to combine the two. Certain cycles in the action research paradigm can benefit from the relative rigor that a case study

imbedded into the design can lend the study. Cunningham (1993), for example, argued that action research should rely on the ability of the case study to focus the inquiry on certain aspects (pre-defined) of the change process being investigated. I argue that the synthesis between the two paradigms enhances the generalisability of the study's findings. This argument is supported by the work of Greenwood and Levin (1998) and Molineux and Haslett (2002) who felt that the synthesis of the two paradigms strengthens the research component of action research studies.

In summary, this study was designed according to Action Research principles and ideology. In Stage 4, The Application of the Manual, a Multiple Case Study design was imbedded.

3.13 Research Tools:

3.13.1 The Researcher:

'Man as a research tool' is a phrase coined by Lincoln and Guba (1985) in order to illustrate the special role that researchers play in the data collection procedure in the constructivist interpretive paradigm. Man is the only tool flexible enough to accommodate the complexity of human existence and interpret, the subtle and constant change that characterises the human experience. Lincoln and Guba (1985) argued that qualitative studies are not characterised by a clear definition of variables and an unchanging and controlled research field. In fact the complexity of human research, the constant changes over time in the research field and the lack of certainty regarding the development of the processes studied and the research methodology in general and research tools in particular, emerge and gain focus throughout the research. There is no way to predict the extent of the use of each research tool, and how they are implemented. The researcher, the human tool, has the characteristics necessary to deal with the vague and unclear situation studied in the qualitative constructivist paradigm (Lincoln and Guba, 1985). Every researcher brings his/her unique perspective to the research field and utilises all his receptors and instincts to obtain and locate information. Good researchers are those who have tolerance, empathy, patience and lack an inclination to criticise and be judgmental (Lincoln and Guba, 1985).

The researcher's self is involved and is integrated in the research (Woods, 1996). Since the research object in social science research is a product of thinking and intention, it cannot be separated from the thinking and the intention of the researcher. A qualitative researcher is an integral part of the investigation, is involved as an observer-participant, as an in depth interviewer or as a leader of a focus group. As such the relationship between the researcher and the participant is a subject-subject relationship and not a subject-object relationship (Sciarra, 1999). In my research I intended to learn about the THR practice in general and my THR practice in particular by conducting an action research (Sagor, 2000). I was a 'practitioner-researcher' (Fox, Martin and Green, 2007) the one who conducted the Therapeutic Horseback Riding sessions. As such, I found myself reflecting upon the cases I developed, examining and re-examining my professional experience and synthesising a meaningful praxis.

3.13.2 The Intake:

The Intake meeting is the first meeting I had with my client and the accompanying parent(s). The intake lasted two hours and, where needed, the intake was prolonged accordingly. During the Intake, following my explanation and presentation of the objectives of the research, the parents that agreed to participate were asked to sign three forms and to complete a battery of questionnaires. The first form to be completed and signed was the 'informed consent form' on which parents indicated their agreement to participate in the research (Appendix J, p. 330). The second form was a 'confidentiality waiver' (Appendix K, p. 332) that gave me access to information if needed, from the child's homeroom teacher and other professionals who treated the child. The third form was an agreement that I will be the child's THR practitioner (Appendix L, p. 333 - this form is part of the farm's file). I kept two files on every case. One file was the farm's file and the other file was for my data collection. In addition, I kept a Research Diary on each case (Appendix F.4 – Hillary – pp. 298-303; Appendix G.4 – Saul – pp. 310 – 313; Appendix H.4 - Terry pp. 317 - 320).

The parent(s) was given a letter signed by me (Appendix M, pp. 334-335), which explained my research and its objectives and their role in it. This letter put an emphasis on the fact that I will observe the rules of ethics in my study and that I will

not publish any identifying details about the child or the parents and that the information given to me will remain confidential and that the child and his parents had the right to leave the research at any time.

There were 4 questionnaires that were completed by the child, his family and me while I interviewed the parents and child. The first questionnaire was the farm's standard Intake (Appendix N, pp. 335-339). This questionnaire consisted of 5 pages with questions investigating the child's history starting from pregnancy, the child's behavioural, emotional and cognitive state, the child's social life and hobbies, the child's family structure and relationships at the time of the intake. In addition the parent(s) and child were asked questions about their choice to enroll in the THR programme and what they expected to gain from it.

The three other questionnaires were for additional research data collection. One was an ADHD Inventory Questionnaire (Appendix O, p. 340), which consisted of 29 questions (Connors' Rating ADHD Scale, CRS-R, 2000). The answers were recorded on a Likert scale ranging from 1 being the lowest and 10 being the highest value. The ADHD Inventory Questionnaire was completed during the Intake session and each answer was discussed by parent and child and clarified by me. This questionnaire was completed again at the end of 30 therapeutic horseback riding sessions when the procedure was repeated.

The second questionnaire used for research data collection was a Self-Esteem Questionnaire (Appendix P, p. 341) that included 25 descriptions of a child (Eithan's Questionnaire, 1987). My client was asked to evaluate himself by comparing himself to that child by choosing one of five possibilities: "I am definitely like him", "I am like him", "I am a little bit like him", "I am not like him", "I am definitely not like him." This questionnaire was completed twice, during the intake session and at the end of the therapeutic horseback riding programme.

The third questionnaire was the first Parent Weekly Report, which they (parent (s) and child) completed together with me during the Intake session (Appendix Q, p. 342). This questionnaire mapped five major ADHD symptoms: organisation, concentration, distraction (focusing), fidgeting (relaxed), anger out-burst (calmness), and two compound symptoms: self-confidence and self-image. A

Likert scale was provided for this purpose with values from one to five on which parents were asked to indicate their evaluation of the child's growth and development on these symptoms and experiences. The parent was asked to complete this questionnaire every week and bring it to the THR session. In addition the child was asked to bring a weekly list of successes.

Additional research data was collected from the home class schoolteacher with the help of the Teacher Report Questionnaire, which included the same questions as the Parent Weekly Report Questionnaire (Appendix Q, p. 342), but with regard to the child's behaviour in school. The teacher submitted this form 2 times: at the beginning of the THR programme and after ten weeks of THR sessions. Additional data was collected from the home class teacher during interviews and conversations (informal interviews).

3.13.3 Interviews:

Throughout my research I planned to use different data collection methods, each designed to provide a different angle of observation on the research field. I kept in mind that I should be ready to use tools I had not planned to use at first (Sabar Ben-Yehoshua, 2001). The main data collection instrument that I used was the interview. Interviews are considered to be the fundamental data collection method used in qualitative research in order to understand people's responses and perceptions in a particular situation (Richardson, 2003; Fontana and Frey, 2000). I also knew from my experience as a therapist that asking questions and getting answers is much harder than it may seem at first.

> *The spoken or written word has always a residue of ambiguity, no matter how carefully we word the questions and how carefully we report or code the answers. Yet it is one of the most common and powerful ways in which we try to understand our fellow human beings* (Denzin and Lincoln, 2000, p. 645).

During the pilot stage of my research 10 parents and 10 THRPs, were interviewed.
In the fourth stage of my research (Application of the Manual), I interviewed three children who were diagnosed as children with ADHD, their parents and their teachers. All together 9 interviewees (3 children, 3 parents and 3 teachers) or more in cases where more than one parent per child participated. This array of interviews

helped me to collect large amounts of data. The more I contemplated the research methods and procedure the clearer it become to me that the research questions, the data collection techniques I have chosen and the method of data analysis (content analysis and field analysis) are dependent upon one another. In my choices this interdependence played a central role.

Sabar Ben-Yehoshua (2001) mentions three types of interviews: the open-ended interview (unstructured), the structured interview and the semi-structured interview. The latter is the one I used in my research. Willig (2004) reported that:

> *Semi-structured interviewing is the most widely used method of data collection in qualitative research in psychology* (Willig, 2004, p.21).

This type of interview focuses the interview around the research questions and allows follow up questions when answers need to be further developed or when unexpected processes are discovered.

3.13.3.1 Strengths and weaknesses of semi-structured interviewing:

Strengths:

One of the strong points of semi-structured interviewing is that it is a method of data collection that is compatible with several methods of data analysis such as discourse analysis, content analysis, grounded theory and interpretative research (Willig, 2004). Another strong point is that it is somewhat easier to arrange (negotiating a time, place and subject with participants) than other forms of qualitative data collection (Willig, 2004). In semi-structured interviewing, one gets in-depth valuable information. The researcher needs to learn simple conversation skills in order to conduct a semi-structured interview, to be precise in record keeping or transcription and to be focused on the research questions to the extent that answers are clarified and metaphors are collected (Sabar Ben-Yehoshua, 2001). A very important and strong point is the fact that semi-structured interviewing has direction and a defined goal. There is a structure (partially) and the questions are being asked according to a planed order. The researcher leads the interview; he asks short and clear open-ended questions and the interviewee answers by giving long descriptive answers. The role of the researcher is to encourage the participant to talk, by showing interest, by providing evidence of deep listening, complimenting the participant on his knowledge and thanking him for sharing this knowledge.

These are the characteristics of an ethnographic interview (Sabar Ben-Yehoshua, 2001). Furthermore, participants have the opportunity to share their ideas and thoughts about a very important issue in their life. Finally, using the semi-structured interview required researchers to repeat the same questions when interviewing participants and make a comparison between the answers of different participants thus getting a feel for the relative strength of an idea or theme (Sabar Ben-Yehoshua, 2001). The questions that I used focused on the research questions (Sabar Ben-Yehoshua, 2001). As a rule I used questions that qualified the processes being researched (e.g. what can you tell me about how you…), value oriented questions (e.g. what do you think is the contribution of THR to…?) or action related questions (e.g. what do you propose can be done about…?).

Weaknesses:

In spite of the fact that the research interview is not a therapeutic one, it requires adopting all the rules, the 'do and do not do' governing the 'Helping Interview' (as in a therapeutic session) and for that, one needs to be skilled in interviewing (Benjamin, 1998). It is important for instance, not to be judgmental or critical toward the participant. As a therapist, I am skilled in the Helping Interview and these skills helped me when conducting interviews. While I conducted interviews, I needed to keep in mind that the interview was not a therapeutic session. I found that using semi-structured interviews required me to maintain high levels of concentration and was tiring.

3.13.4 Observations:

Observations in qualitative research are a systematic notation of events, behaviours, processes, happenings and objects in the social environment of the selected research field (Marshal and Roseman, 1989). According to Bar Shalom (1999) social research uses mostly types of participative observations, as there is no possibility to investigate social interactions without becoming immersed in the field, without becoming a part of the social fabric present in the field. Observations are considered to be the preferred tool of data collection in qualitative research (Yossifon, 2000). There are different types of observations, and they are classified depending on the

observer's position and role in the field. Observations range from situations where the researcher is an outsider to the processes being researched to situations where the researcher is a full participant and fully involved in the process being researched (Shkedi, 2007). It is important that observing researchers be capable of conducting their observations in a precise and sensitive manner (Sabar Ben-Yehoshua, 2001, Yin, 2009, Willig, 2004). Other criteria for classifying observations are based on whether the field procedures are focused on both sources of information and on what type of information need to be collected. Open observations characterise research in which the researcher needs to get acquainted with the field and the potential processes being studied, in an informal fashion. In contrast, focused observations are characterised by a clear understanding of which processes are to be observed and which sources of information are to be observed. The focused observations require that the researcher prepare schedules of observation (table shells) and observation protocols that orient the observer with regards to time, place and source. The researcher, who is an integral part of the field, documents his actions close to the time they occur. It is important that the observer use all the senses available to himself and collect observations annotated when possible with authentic language and cultural characteristics (Sabar Ben-Yehoshua, 2001).

The current research included the use of non-participatory observations conducted during the pilot stage and participatory observations conducted in the fourth stage of the research. I conducted non-participatory observations of THRPs during sessions in which children challenged by ADHD participated. During the pilot stage of the research the observations were open, while during the fourth stage of the research the observations were focused.

3.14 The Learning Environments

The interviews and observations that were used collected data regarding the quality of the case management process, the quality of the learning process and about the environments supporting learning at home, in the arena and at school. These three learning environments among many other learning environments in which the child diagnosed with ADHD is challenged daily, were chosen and focused on during the research, since they emerged most clearly during the intake interview. The nature and interaction of the field forces at work between the three fields (home, riding

arena and school) and within them, forces that can amplify learning or handicap it, were explored in order to better understand what can be done more effectively in the managing of ADHD cases in the course of a THR session (Micro) and for the duration of the programme (Macro).

3.15 Data Analysis

Data analysis is a systematic process of rewriting and organising the information collected with the different research tools (interviews, observations, documents, questionnaires) and other materials accumulated in order to increase the researcher's understanding of the subject and facilitate its presentation to others. The term 'data analysis' refers to the process of reducing large quantities of raw data into manageable categories so that themes and field theories can more readily emerge into meaningful configurations (Sabar Ben-Yehushua, 2001; Walsham, 2002, 2006; Silverman, 2005). The information collected is divided into units for handling and processing. Looking for patterns and finding out what is important, what was learned and what was created. The analysis ultimately creates, from the researcher's collected data, products such as a clear picture of the processes at work and their interaction in the field (Bogdan and Biklen, 2007).

Data analysis can be a complex and slow process. It is a systematically crafted process with fixed steps and measures based on transparency. Transparency reflects the commitment of the researcher to report in a clear and explicit form on all phases of his research, including personal views, methods and procedures of data collection, how the data was analysed and the way it was presented. Transparency reflects on the whole research process including all stages of research and data analysis. Full disclosure allows any reader to judge and appreciate the research process (Glaser and Strauss, 1967; Lincoln and Guba, 1985).

In qualitative research there are two main strategies of data analysis. One way is to analyse it as soon as the data was collected. The second way of analysis is to collect all the data first and only then to start analysing it. Experts in qualitative research prefer using the first strategy (Sabar Ben-Yehoshua, 1995). Even though I do not consider myself an expert in research, I preferred the first strategy, collecting and analysing the data simultaneously. I believed that by doing so, I could gain new

insights and adjust my research tools if necessary, so that they were more focused on collecting relevant data needed to answer my research questions.

Practically, after each session I tabled the data following the development and growth of my clients as they worked on therapeutic objectives. In addition I made generous entries in my Research Journal and followed up on emerging themes and processes.

The data analysis process included several steps built on and relying on each other. An important beginning stage in my research was to reach a state of clarity in my own thinking process and on the key targets of analysis. The analysis method involved encoding and sorting the information by categories. This is a process of sorting and reorganising of information according to recurring themes, processes, or events. Categorising data helps reducing it to manageable dimensions.

The encoding system I used included several steps. First I analysed the data as soon as it was collected. I then prepared the data for a global analysis. This stage included a comprehensive reading of all protocols, official and unofficial material, in order to get a complete picture of the data (Agar, 1980; Shkedi, 2003). The second stage was an open coding of the data creating categories that represented themes that arose from observations, interviews and documents (Strauss and Corbin, 1990). At this point categories were temporary with no hierarchical order between them. This is the stage of reviewing of themes and organising them. The search is for repetitive patterns; marking words that emphasise the themes defined and paying attention to data that reinforced the selected encoding themes. In this respect I employed different types of codes: Codes of context, which related to general information and which were visible from my study of the data. Codes of definition on conditions or situations, referred to the research subjects' definitions and their perspective on the events, processes and relationships they formed (Bogdan and Bilklen, 2007). An example can be: what is the research participant's experience, perspective of his school, the school's staff, his parents, his friends and so on. Another type of coding can be the participant's perspective, his way of thinking and interpreting events, which also include norms, laws and concepts. Codes of participant's thinking about people, their perception of themselves and of others in their surroundings, is another type of coding that I used in process coding. Using

this type of coding I created lists of events and processes that took place in the research field, formal events and informal events. Another type of codes that I used was codes of strategy tactics, skills, maneuvers and other ways in which people reach different objectives. As an example is the ways in which classroom teachers adapt their class to the needs of children diagnosed with ADHD; or adapt teaching techniques or feedback methods. Codes of relationships and social structures, social roles and hierarchy, are another set of codes that came in handy while I evaluated my data. I found that I had to be flexible and creative as I built my own codes based on accumulated data (Bogdan and Biklen, 2007).

When data organisation is finished, it is important to read and reread the data, transfer data as needed, change codes, remove one of the categories, merge categories, remove and add according to our need to facilitate our emergent understanding of the data (Shkedi, 2003). In the next stage a selective coding is used. The aim is to find connections between the various categories that were found and their placement in a logical sequence, or show the development of processes over time.

Since one of the intended outcomes of my research was to understand the processes elicited and nurtured by the KTR model for THR and evaluate their effectiveness selective coding played an important role in the analysis of data (Glaser and Strauss, 1967).

In addition, Bogdan and Biklen (1998) made three recommendations that I adopted in analysing my data. The first recommendation is not to worry about being speculative, using my imagination and being creative about the analysis process and the findings. Failure to give legitimacy to the researcher's creative thoughts may inhibit the process of analysis. However once speculative ideas are formulated we must make sure that data supports these ideas. The second recommendation is related to insights. Ideas and insights will arise from the researcher’s interaction with the field and the data being collected. It is important to register them, discuss them with significant others, friends and colleagues. This recommendation was particularly meaningful to me. I consulted and debated my interpretations and insights with significant others, some students in the THR programme and others,

researchers and academics I met professionally. At times I had to go back to the data and bring more evidence for my interpretations. During other times ideas crystallised during the debate over one point or another. The third recommendation dealt with keywords. It is recommended, claimed Bogdan and Biklen (1998), to highlight words that the research participants use repeatedly as they may be clues to processes and ideas research participants consider to be important. This strategy was most useful during the early stages of my analysis.

I adopted the Bogdan and Biklen (1998) recommendations and used them during data analysis in this thesis.

3.15.1 Analysis of the research data:

The data collection procedures were focused on answering the research questions. Two types of research data were collected: textual data (words) and numerical data (numbers) that evaluated the rank order and intensity of ADHD symptoms challenging my clients. The numerical data was used descriptively. Two data analysis strategies, narrative analysis, that cannot be used with numerical data (Hunter, 2010), and grounded theory, that focuses on the building of theory (Cho and Lee, 2014), were considered and rejected. I found that inductive content analysis was the best fit for the needs of my study and the type of data that I collected.

Content analysis is a method of analysing written and verbal communication messages, as well as numerical data that has been described verbally (Cole, 1988; Harwood and Garry, 2003). The use of inductive content analysis is recommended in cases where there are no previous studies, or very few of them, dealing with the processes being researched or when reported findings are fragmented as is the case in the THR with clients challenged by ADHD field.

In the fields of therapy and nursing qualitative content analysis provided an advantage as it was shown to effectively address large volumes of textual data and different textual sources laced with numerical data that can be verbally described (Budd, Thorp, and Donohew, 1967; Lindkvist, 1981; McTavish and Pirro, 1990;

Tesch, 1990). Textual data might be in verbal or print form and was obtained from open-ended survey questions, interviews, research diaries, observations, or manuals while numerical data can represent thermometer readings and other data from medical charts (Kondracki and Wellman, 2002).

Content analysis has been shown to be an important way to provide evidence to questions regarding the development of processes elicited during therapy and for the development of these processes over time.

The disadvantage of content analysis relates to its focus on the study's research questions, which may obscure unrelated processes that are active in the field. This potential threat to the study's vigor was addressed by using multiple research tools, by keeping meticulous records while in the field and ultimately by asking the client's parents to provide a written summary of their experience.

The data collected during the first stage of the research by using interviews and observations was analysed by using content analysis procedures. Inductive conclusions were refined as themes as they emerged from the data. The relationship between these themes was inductively built until robust categories emerged that led to the formulation of field theories that explained the data. Denzin and Lincoln (2000) called these field theories middle range theoretical frameworks and in this thesis they informed the writing of the THR Manual for children challenged by ADHD.

The manual's guidelines were designed to guide THR practitioners in the design of learning environments. The guidelines incorporated the themes and theoretical frame works that emerged from the data.

The design of the learning environment at the farm incorporates values that support the learning of skills and strategies needed to meet therapeutic objectives. In addition it is designed in such a way as to amplify learning and facilitate the transfer of learning skills and strategies to other learning environments that are significant for the client such as the home and school learning environments.

The manual stresses a range of values such as mutual trust, the assumption of responsibility for the quality of the learning outcomes produced by the THRP and his client, demonstrable high levels of motivation, the development of a common

therapeutic vision and the celebration of success. These values support the creation of a learning climate alive with field forces that can dramatically correct learning curves and propel the client toward the realisation of his therapeutic objectives.

Once the Manual was created, it was presented to three THR expert practitioners who agreed to evaluate the Manual. The THR experts provided detailed feedback that was used for the purpose of fine-tuning the various concepts and guidelines presented in the Manual (Ritchie et al., 2014).

The feedback provided by the three experts was both in writing and verbal. Some of the experts took much longer than others reflecting in detail and in depth through out their feedback. All three experts were debriefed with regards to their experience as experts and with regard to their willingness to adopt the concepts and guidelines outlined in the Manual. All three experts agreed to have their contributions to the manual acknowledged openly. The data collected from the THR experts was summarised in a table (table 2, p. 141) that showed the answers to each of the research questions and the action taken by me to fine-tune the manual.

The fourth stage of the research produced predominantly qualitative results and some quantitative data. A multiple case study design required the analysis of data produced by each case and also the cross analysis of all the data produced by all cases. In each case data was collected from the THR practitioner, the client, the client's accompanying parent and the client's homeroom teacher. The quantitative data collected by repeated measures was analysed and tabulated. The qualitative data was analysed using content analysis.

Once fine-tuned, the Manual concepts, values and theoretical formulations were validated using the Expert Validation Method (Ritchie et al., 2014). This validation process contributed to the validation of the field grounded therapeutic guidelines. Six local and international experts participated in this stage. The data that was collected was specifically directed at the validation needs of the therapeutic partnership I am proposing. In the end the experts reached a consensus around the managed partnership between the home, school and therapeutic learning environments. Consensus was also reached with regard to the field forces affecting the THR learning processes and the principles of case management that evolved from the field-data collected.

I conducted cross-case analysis (analysis between the different cases that I worked with) and a within-case analysis. The within case analysis relates to what is happening in a single bounded case. Data generated by a client challenged by ADHD, his parents, his school and the client's experience on the horse farm were analysed and used to construct meaning. The cross case analysis relates to a larger picture and examined data of all the cases in order to construct meaning. The cross case analysis contributed to the generalisability of the study's findings. In addition researchers reported that cross case analysis helps "magnify" and show case phenomena and processes that might go unnoticed otherwise (Miles and Huberman, 1994).

In summary, most of the data I collected was qualitative data consisting of words and narratives and the method I chose to analyse it was Content Analysis. The purpose of Content Analysis is to reduce huge amounts of data into fewer content categories based on explicit rules of coding. The categories are exclusive words that describe the process studied, looking for attributes (categories) of the processes being studied and the relationships that exist between them in the field (force field analysis). The process of content analysis requires that the researcher bring with him a sense of esthetics, a creative intellectual bend (Sabar Ben-yehoshua, 1995). Miles and Huberman (1994) define content analysis *"as consisting of three concurrent flows of activity: Data reduction, data display, and conclusion drawing/verification"* (p.10).

The Quantitative data collected was integrated in the content analysis procedures and was interpreted qualitatively.

3.16 Validity and Reliability, Trustworthiness and Rigor

In the early 1980s qualitative researchers who were arguing for the need to accept qualitative research were facing criticism aimed at the internal and external validity, reliability and subjectivity of qualitative research. Guba and Lincoln (1981) and later Lincoln & Guba (1985) proposed a new terminology, that of 'trustworthiness' designed to evaluate the rigor of qualitative research. Trustworthiness was to be achieved by researchers through the use of such diverse research (data collection)

strategies as immersion in the research field and prolonged engagement with the research participants (Patton, 2001), multiple observations over time and multiple cases (Yin, 1994), transparent procedures allowing participants to review the data collected, the use of multiple research tools to allow the creation of a holistic view of the research field, collecting and analyzing data concurrently, the use of significant others and the incorporation of associative reflection that would create an objective auditable trail.

Morse et al. (2002), Willig (2004), Sabar Ben Jushua (2001) and Golafshani (2003) represent a more recent group of qualitative researchers that argued for a return to the more universal concepts of validity and reliability. In that respect triangulation is advanced as a strategy for the evaluation of the internal and external validity of research (Mathison, 1988; Creswell & Miller, 2000, p. 126).

I found it meaningful to use the terms validity and reliability in my quest to attain rigor in my research. In order to support my claim I have adopted all aforementioned data collection strategies and used expert validation techniques and triangulation techniques where necessary to shore up my claim.

Validity can be defined as the extent to which our research describes, measures or explains what it aims to describe, measure or explain (Willig, 2004). That is, 'how can I be sure that I am researching the effect of therapeutic horseback riding and processes related to the transfer and amplification of learning strategies and skills acquired during therapeutic horseback riding to the home and class room learning environment?' In order to increase my confidence in the study's findings I have decided to employ a number of research tools such as interviews, observations, narratives, so that more than one angle of observation will be used to answer my research questions. This type of data evaluation called triangulation allowed me to estimate the internal validity of my data and contribute to my confidence in the data collected (Sabar Ben-Yehoshua, 2001; Willing, 2004).

Similarly I used the triangulation method to evaluate the external validity (robustness) of my findings by triangulating my findings with the supporting findings of other researchers who worked in different cultures, with different research tools and different methodologies and participants (Willig, 2004).

Other, simpler ways to make sure that the data collected was valid and appropriate were used by me. These were increasing the time spent in the field (immersion), using significant others to work the data in parallel, sharing the data and interpretations with the participants and working closely with my supervisors (Sabar Ben-Yehoshua, 2001).

3.16.1 Reliable Ways of Gathering Data:

The term reliability refers to the extent in which one can conduct another research and use the same methodology and research tools and obtain the same results. Kirk and Miller (1986, in Silverman, 2002) define reliability as

> *…the degree to which the finding is independent of accidental circumstances of the research* (Silverman, 2002, p. 203).

Measures of reliability both internal and external contributed to my confidence in my findings. Silverman points out that it is important to assure the quality of the field notes. One way of doing so is using a tape-recorder to record my interviews (with the consent of the participant) so that I can listen to them over and over and also let others listen to them and evaluate them. In my research, I used a tape-recorder during my interviews (Shkedi, 2003).

In addition I used significant others (members of my peer-group), in order to obtain their evaluation of my data and it's interpretation. Accordingly, the quality of tapes and transcripts has important implications for the reliability of the research. I also asked the study's participants to consider my interpretation of the data they contributed and provide feedback.

Another technique that gave me confidence in my research findings is my complete immersion in the research field (in the arena, during my contacts with teachers and during home visits).

My view of research methods is that they are a backpack full of tools: data collected, plans for the collection of future data, analytical tools, and more, much more. The tools are mostly manufactured by the researcher and contain some known elements used during daily practice. Some elements are new and unfamiliar and they need to be "worked in". A researcher-craftsman (Shkedi, 2004) keeps track of

his tools, draws them, keeps a diary with recommendations on how to build them, how to maintain them, how to adjust them. The concept is clear – research needs to be replicable so that my colleagues in Australia, for example, will be able to lead the same inquiry and learn from it. The language of research is not a private language but rather a universal one. Knowledge must be shared. Ways to create knowledge must be shared in order to improve practice.

Some research paradigms are easily replicable but other research paradigms can only be replicated with effort. In every case the researcher must draw a clear "replication map". Where the paradigm is not easily replicable the researcher must compensate rigorously. One way to compensate might be to add to the research tools features that facilitate replication: e.g., interviews and observations can be video taped and recorded so that more than one researcher can access the records and replicate the analytical and inductive meaning making processes. In fact criteria of acceptable replication levels can be set, and differences worked out till these levels are reached (Willig, 2004).

The paradigm chosen by me is a mixed bag. Some parts are easily replicable, others needed shoring up, and needed adjustments.

Following are some examples: In the semi-structured interview, I used a set of standard questions with an option to add clarifying questions. On the bipolar continuum standardised not standardised, the more one uses a standardised method, the more the research is replicable. The clarifying questions are not standardised. They were varying from interviewee to interviewee. Knowing this in advance I deployed additional research tools so that my confidence in the findings will be high if the evaluation of my findings by triangulation will be high. This procedure is replicable. My non-participatory focused observations were replicable.

Two other procedures I used were highly replicable: The experts' validation of the manual (Ritchie et all, 2014) method and the developmental measures based on educational and DSM-IV criteria for evaluating ADHD challenged students. These procedures are highly standardised and replicable.

The qualitative paradigm is built on the value assigned to unique, not-replicable subjective experiences. One of the main features of its methodology is it being a

"developing methodology" which is uniquely adapted to this epistemological feature. The ways in which knowledge and meaning were constructed were carefully documented to provide other researchers with the infrastructure needed to replicate. Research is about making meaning, constructing knowledge to inform practice and that is the process that I wanted to engage with, and do so in such a way that others can use my constructs and replicate the results. I want practitioners and ADHD challenged children to benefit from my research so I decided to write my thesis in a research language they all understand.

There were particular challenges this method presented me with. I have a dream – in my dream I see myself distributing my manual to the many different therapeutic farms that exist throughout the country. This manual contains guidelines for case managers on how to facilitate a collaborative partnership between parents, educators and THRPs in order to improve the lives of children challenged with ADHD.

In the process of achieving my dream I see a large number of challenges in front of me. The more I got into understanding and planning my research, the more excited I became. I liked to be confronted by challenges especially in an area that is dear and important to me.

All my life I have been around horses. I have ridden horses since I was a little girl and I feel I know them and know how to communicate with them. I have a very unique and special relationship with the horses I use during my THR sessions. This helped me in interviewing my participants, and I understood their experience with the horse. I am also an experienced therapist and I use and teach the skills of the helping interview. I am familiar with working with children with ADHD through my work with families with children challenged by ADHD.

Prior to conducting this research, I did not have any experience in conducting research; I needed to sharpen my research skills, being in the field, collecting data without biasing it and analysing it.

I have studied therapeutic horseback riding. On the one hand I see this fact to my advantage. Acting out a dual role as a therapist and a researcher in the field of therapeutic horseback riding raised some issues of priorities and professional focus.

Most importantly I worked with other participants in my Ed.D programme and made sure I belong to a learning community. Throughout my research I used ways to protect myself from getting overwhelmed by the whole picture, and took each step as I was ready while using a systems approach when constructing meaning.

3.17 Ethical Issues and How They Can be Resolved:

The purpose of this study is to gain new knowledge and to offer it to others in order to help children with special needs to develop according to their genetic map, overcome obstacles encountered in their learning environments and leverage the parents-therapy-school partnership to their advantage. In the process of every research it is easy to lose the balance between the research benefits and the benefits of those who participate in the research. In other words there is always the question to whom should the researcher be loyal, to the research or to the participants (Sabar Ben-Yehoshua, 2001).

> *...Qualitative researchers accept the fact that research is ideologically driven. There is no value-free or bias-free design* (Denzin and Lincoln, 2000, p.385).

Early on I identified my own biases and articulated the ideology or the conceptual frame for my study. By doing so, I could see easily how the questions that guided the study should be crafted (Denzin and Lincoln, 2000) and what type of data I will need to collect in order to formulate meaningful answers to those questions.

"To act ethically is to act the way one acts toward people whom one respects," said Graue and Walsh (1998, p.55). The term 'Ethics' according to Yizraeli and Zohar (2000) refers to a field in philosophy, also known as moral philosophy, that formulates universal duties and encompasses the social responsibility that is related to the requirements of morality (Yizraeli and Zohar, 2000). The code of ethics governing research involving human beings refers to different aspects of the relationship between the researcher and the research participants. The code of ethics provides principles and guidelines that assist the researcher to maintain standards and to conduct his research, so that it benefits society and especially the research

participants in a way that respects participants' rights. The researcher is careful to avoid harming the research participants.

In this research horses were part of the therapy and ethical dilemmas had to be resolved prior to proceeding with the research. I considered it important that the well being of the horses I used during research would be guaranteed.
During my search for the right farm on which to conduct my research I paid close attention to the way the farm's staff treated the horses. E.Z. farm was the farm chosen for my research especially for the fact that they have considered the following five basic welfare aspects explained bellow (Fine, 2010).

On E.Z. farm the horses had access to fresh water and a diet that maintained their full health and vigor. After every two sessions (one hour), the horse had a rest and was given access to water. All the horses were provided a suitable environment, including shelter and a comfortable resting area. The horses were well taken care of. A sick or injured horse stayed in his stall or in an open field and was not allowed to work until he was completely healed. A horse that was severely sick was taken immediately to the animal hospital. The horses were kept in a safe environment and the conditions of their keep were good in order to avoid mental suffering. They were provided with sufficient space, proper facilities and the company of other horses.

Most countries publish a code of ethics for every profession in general and guidelines for conducting appropriate research in particular. The British Educational Research Association published in 2011 the Revised Ethical Guidelines for Educational Research (BERA, 2011). These guidelines specify and emphasise the researcher's responsibilities to three parties: the participants, the research sponsors and the educational research community.

As a researcher it was very important for me to remember that in the process of gaining new knowledge, I must always keep in my mind a set of concepts of right and wrong behaviour, the basic principles of morality, honesty, justice and respect for all people. My first principle of morality was that **no harm be done in any way** and I did always respect the participant's privacy and kept confidentiality. Thus, I

always remembered the need for anonymity and did not use anyone's name or identifying detail in my records or publications.

My relationship with the participants, the children, their parents and the teachers, was characterised by honesty and openness. I informed them of the research process and the data collection procedures and of what was expected from them. The results and interpretations were transparent and available for them to see. There were no secrets or hidden elements between us.

I made sure that every participant agreed to participate in the research on his/hers own free will and was not pressured to participate (Kfir and Shamai, 2002, BERA, 2011). I gave participants all the information they needed to make a responsible and informed decision and did not attempt to pressure or convince anyone to participate in my research against his/her better judgment. In addition, I informed the participants' parents in writing and orally that they had the choice of withdrawing from my research any time they wanted to do so (Appendix M, pp. 334-335, also in Appendix J, pp. 330-331). Indeed, three of the children who were enrolled in the THR research programme chose to leave the programme, because of financial difficulties. I accepted their decision with respect.

Ethics During Interviews:

There were three sets of interviews: during the pilot study, interviews were conducted with THRP and with parents of children challenged with ADHD, with THR experts, and during the research. Most of the interviews were tape-recorded with the agreement of the participants. I informed the participants about the objectives of the interview. I conducted the interviews. The interviews were an hour long, and when needed, longer. The participants gave their full agreement to participate in the interview.

I made sure that whatever I recalled and reported in my research did match reality as it was experienced by the participants and I did not change any detail to fit any theory or assumption.

Furthermore, when I came across information that was not relevant to my research, but was interesting and "juicy", I did not share that, or use that information in any way (e.g. information about marital conflicts or financial problems).

In short, I acted to fully inform the participants in my research regarding procedures, data collected and processed, conclusions and recommendations. I constantly checked the validity of my findings and theoretical constructs with the participants and I informed them about the intended publication of the research findings. It was and still is my goal to contribute significantly to the quality of life of each and every participant and to his or her personal and professional development. These "ideological intentions" were the critical criteria against which I evaluated my research.

I also fulfilled the requirements of the academic journal and the international conference I used for the dissemination of my findings. I was careful that the article I published and the presentation I gave at the international conference were written and done by me. The article was sent only to the magazine in which I wanted to publish and not anywhere else. The published material and the declarations made in it did not harm in any possible way the civil rights of participants or other interested parties. I did not infringe upon or violate the copyrights of any other party.

The data collected was coded using fictitious names and was stored on several secure computers and external computer memory devices.

All participants gave me permission to publish the findings as part of the informed consent process that preceded their participation in the research (Appendix J, pp. 330-331).

Summary

This chapter examined the methodological ground of the research. My epistemology and ontology were presented. I have stated that my epistemology, the way I constructed my knowledge is firmly rooted in the humanistic philosophy. The methodology that best fit my research objectives and philosophy is the qualitative interpretive methodology and that my research is naturalistic and inductive. The research design followed the action research principles and had six stages: the pilot study, the manual, expert validation of the manual, application of the manual in the

field following a multiple case study design, the fine tuning of the manual and the expert validation of the manual. I reviewed the research tools that were used in this research: the researcher, the Intake, the semi-structured interviews, the observations, documents, the questionnaires and the research diary. The analysis of the data collected was discussed. The validity and reliability of the research and the transferability of its findings to a wider audience were also discussed and ethical issues and how they can be resolved were presented.

The research design had several unorthodox features. Two of the stages, 3 and 6, were expert validation stages that provided the basis for our argument that the study's findings were transferable to the practices of THRPs in Israel and overseas. In stage four a multiple case study was imbedded into the overarching action research paradigm. This design was unique and its success argues for its adoption by other researchers.

The next chapter presents the research findings. The findings of the pilot study were presented first and then the findings of the research were presented. Through data analysis, themes emerged and were grouped into categories.

Chapter 4

Findings

4.1 Introduction:

The current study evaluated the outcome and the effectiveness of a new therapeutic approach for children challenged by ADHD in the nine to twelve age group. The research was conducted in six stages. This chapter presents the findings of all six stages of the research. Stage 1, the pilot study, generated three emergent themes: parents' perception of the THR process, THRPs perception of therapeutic horseback riding for children challenged with ADHD and the effect of therapeutic horseback riding on children challenged with ADHD. Each theme was presented and evaluated. Stage 2, the stage during which the new therapeutic approach crystalised, was informed by the findings of the pilot study. During this stage a manual for THR practitioners conducting therapeutic horseback riding following the KTR model of Therapeutic Horseback Riding, was published. During Stage 3 data was collected following the experts' validation of the Manual and was presented and evaluated. Stage 4 presented the findings of the application of the Manual in three cases are presented and evaluated in 7 different tables for each child. Two tables are showing the comparative mapping of the child's therapeutic objectives from the teacher's and parent(s) perspectives, before starting therapy and after 10 sessions of therapy. Three tables are sumarising 10 sessions of therapy one for each for client, documenting the development of the client in therapy from the parent(s) perspective. Additional data presented in table form show the child's ADHD inventory: before therapy started and after 30 sessions of THR and the child's self esteem score before THR and after 30 THR sessions. All tables are showing improvement in all parameters. During Stage 5 data was collected from the process of fine-tuning the Manual and showcased. During Stage 6 the findings of the external validation process of the final draft of the Manual are presented and evaluated.

My overall aim was to create, implement and evaluate the Knowing Therapeutic Riding model (KTR model) that would inform learning partnerships between school (teachers), therapist, child and family. When effectively managed, the KTR model can improve the lives of children challenged by ADHD. Such a partnership would not only reap the benefits of therapeutic horseback riding, but also learn to support it at the family and classroom levels, and thus contribute to its effectiveness (Kreindler and Kreindler, 2012; Yagil, 2008).

The findings of this research showed that when THR practitioners (THRPs) facilitated the acquisition and transfer of skills and strategies learned during THR sessions to other environments, such as family and school, the therapy was perceived as effective by client, parents and teacher. The KTR model calls for the nurturing of this partnership in order to support the learned skills and amplify them.

Following the first printing of the manual three practitioners were asked to evaluate it and the feedback they provided was incorporated in the manual. The revised version of the manual was then evaluated in the field.

This chapter examined the research data using the content analysis method to identify common themes and categories. In turn, the emerging themes and categories were examined for: evidence regarding the KTR model's effectiveness in facilitating the learning of skills clients need in order to achieve their therapeutic objectives; evidence that the KTR model facilitated the transfer of skills clients learn during THR to the home and school environments; and evidence that the KTR model facilitated the amplification of learning.

The research findings were examined for evidence of major processes that grew and developed during THR and were evaluated with respect to their internal validity and reliability.

4.2 The Pilot Study:

The pilot study, which is the first stage of this study, involved interviews with parents of children challenged by ADHD and with the senior THRPs (Therapeutic Horseback riding Practitioners) treating these children and observations of THR sessions. The sessions that were observed were those in which the children whose parents were interviewed participated and were conducted by the THRPs that were interviewed. There were three themes that emerged which contributed to the development of the manual.

Figure 2

Pilot Data

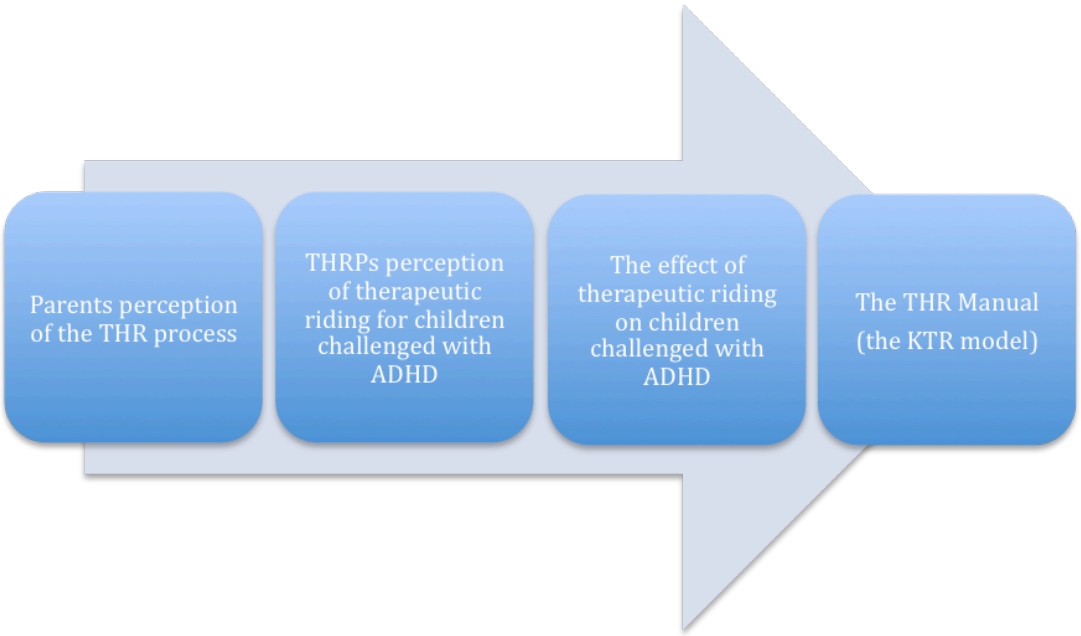


Figure 2 presents the data collected by the pilot study conducted during the first stage of the research, which contributed to the development of the THR manual.

The first stage of this research consisted of a series of interviews and observations in which ten parents and ten senior (five or more years of THR experience) THR practitioners (THRPs) participated. The study's data was collected with the help of interviews and observations with parents of children diagnosed with ADHD and with the THRPs treating these children. The interviews and observations of the THR sessions were conducted in parallel in four different therapeutic horseback riding schools. The interviewing focused on the parents' perception of their child in three different environments: at the farm, at home and at school. The interviews and observations of THR practitioners focused on their perception of Therapeutic Horseback Riding in general and of children challenged with ADHD in particular.

The results (Appendix A, pp. 271-273) showed that nine out of the ten parents that I interviewed reported that the child behaved differently when on the farm, after a few sessions on the horse. All parents reported that the child is calmer, in control, able to concentrate and keep his concentration for extended periods of time (about

30 minutes) during complex tasks he is asked to perform and feels good about himself. Parents also reported that once the child is back at home or in school, these changes don't last, and his behaviour returns to its previous patterns. Only one of the parents reported noticing behavioural changes in their child's behaviour at home following THR (Appendix A, Ronen's father, p. 273).

Themes emerging from the data collected from parents and from THRPs were grouped into one main category: Perception of THR. This category was divided into two sub-categories: Parent's perceptions and THRPs' perceptions. Additional data from the pilot study appear in Figure 4.

Figure 3

Pilot Study Findings

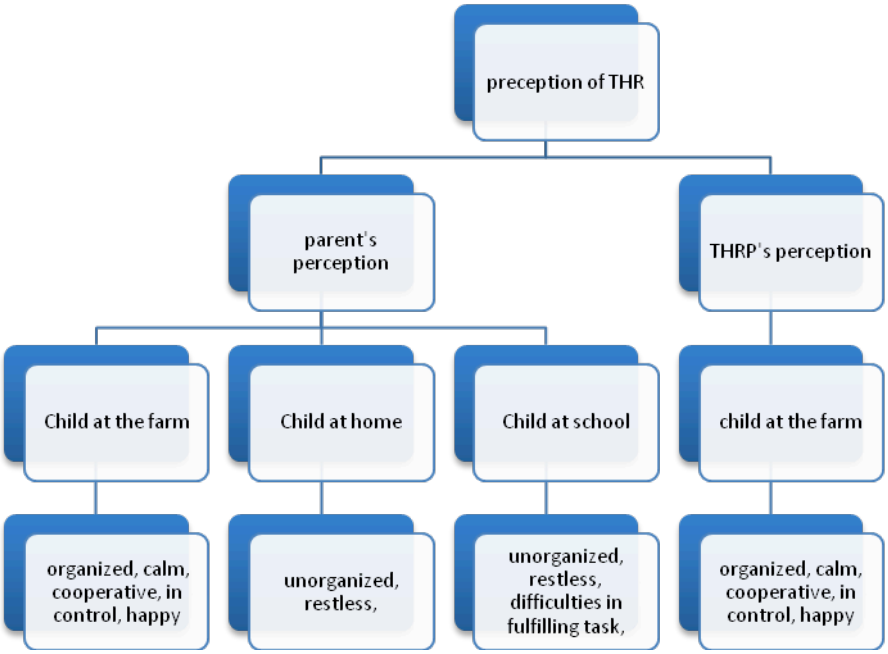


Figure 3 presents the perception of THR from the parents' and THRPs' perception. The data was collected by the pilot study conducted during the first stage of the research and contributed to the development of the THR manual (Appendix A, 271-273 and Appendix D, pp. 277-290).

4.2.1 Parents' Perception of THR According to the Parents' Interviews at the Pilot Study:

4.2.1.1 The Child at the Farm:

All parents stated that their child ***loves to ride*** and that he ***listens to the instructor***. The child at the farm was reported to be ***organised, calmer, in focus and in control.***

All the names mentioned throughout my thesis are pseudonyms in order to protect the identity of my clients (see chapter 3).

Gilli's mother said:

> *…I know that my son **loves to ride**, he is waiting for the riding lessons the whole week. I see how **he listens** to the riding instructor and tries very hard to do what he tells him…He is **organised here and in control**. You have to see how he controls the horse, it is amazing! I don't understand, here he is on the horse for thirty minutes and does not complain and I know that if the lessons were even longer he would have no problems* (Appendix A, Gilli's mother, p. 271).

Also David's mother reported that her son loves to ride and enjoys it. He is happy, calmer and cooperative:

> *…my son **loves to ride** and he is having a great time here…this is one place that he just enjoys, and he is happy… He is looking forward to come here; **he is calmer, cooperative and happy*** (Appendix A, David's father, p. 271).

Asaf's mother added that her son sees the horses as his friends. He hugs and kisses them. In addition he talks to his mother more than usual when on the farm:

> *…he is happier, especially when we come here. He **loves to ride and** he loves the horses, he tells me that the horses here are his friends...Here **he is much calmer** and I see how he treats the horses, he hugs them and even kisses them...When we come here **he talks to me more**, and he is like **a different child*** (Appendix A, Asaf's mother, p. 272).

Danna's mother stated that her daughter is also a different child when on the farm:

> *Here on the farm it is **like having a different child. She is calm** around the horses, she **does what the instructor tells her to do,** and she very seldom gets angry or frustrated… She is so happy here…* (Appendix A, Danna's mother, p. 272).

Edo's mother also stated that her son loves to come to the farm and ride. She finds him calmer and more relaxed:

> *... he loves to come here and be around the horses. He **likes to ride**. He is **calmer and more relaxed** than when he is not with the horse* (Appendix A, Edo's mother, p. 272).

Like all the other parents Yaron's mother also stated that her son loves to come to the farm and is happy there. He listens to the instructor and feels as though he is on top of the world:

> *Yaron is **eager to come to the farm.** He is happy here, as simple as that. He **listens to the instructor** and feels good with the riding. He tells me that when he rides he feels that he is on top of the world* (Appendix A, Yaron's mother, p. 273).

The themes and descriptions of the child's behaviour on the farm repeat themselves and the between cases analysis shows strong internal validity (Appendix A, pp. 271-273).

4.2.1.2 The Child at Home:

The parents describe their children's behaviour at home as being completely different from their behaviour on the farm. At home the children **do not listen to their parents, they are disorganised, are having difficulties in preparing their homework and are angry most of the time.**

Gilli's mother describes her son's behaviour as a child who does not listen to his parents, he is not organised, his room is a mess and he is angry most of the time:

> *He **does not listen** to what we tell him, his room is a mess, he cannot do his homework alone and when I sit with him it is horrible, we always fight and then I give up and let him go. He **gets angry very easily**...going to sleep is a whole production with him…at home he does not listen to me or to his father. Gilli is not an easy child because of his ADHD. He is **very angry most of the time**, gets into trouble with his brothers…* (Appendix A, Gilli's mother, p. 271).

Also David's father like Gilli's mother stated that David is very angry most of the time:

> *He **is very angry most of the time**, gets into trouble with his brothers* (Appendix A, David's fathers, p. 271).

Asaf's mother stated that her son gets into a bad mood and when that happens it is very hard to be with him:

> *Asaf is a lovely child, but when **he gets into a bad mood** he is horrible and there is nothing we can do to calm him down. Yesterday he had a fight with his younger brother, I thought he was going to kill him. I had to yell and hold him so strongly that I was afraid I was going to break his arm* (Appendix A, Asaf's mother, p. 272).

Danna's mother also stated that her daughter is restless, gets angry easily, she is disorganised and does not listen to her parents:

> *She is **very active and restless** and also **gets angry very easily** over little things… **restlessness, anger outbursts, difficulties in organising things like homework or organising her room**. She **does not listen to** what we tell her to do or not to do…* (Appendix A, Danna's mother, p. 272).

Edo's mother also stated that her son is restless and moody and gets angry easily:

> *Edo is different. He is so **restless and moody.** He can switch from being O.K. to **being angry** in a second…* (Appendix A, Edo's mother, p. 272).

'The child at home' themes and the descriptions of family life and function that emerged repeat themselves and show strong internal validity in the between cases analysis.

4.2.1.3 The Child in School:

Parents reported that their children had disciplinary problems and difficulty accepting authority when at school. Parents further reported that their children are often asked to leave the classroom as punishment for unruly behaviour. In addition parents stated that their children have very few if any friends.

Gilli's mother said that:

> *...at school he **gets into lots of troubles**, because he **does not listen to the teacher.** ...it is very hard for him to sit in the class for more than ten minutes* (Appendix A, Gilli's mother, p. 271).

David's father said similar things:

> *(David)...**gets into trouble...at school** with the teachers and his classmates. We are called to school a few times during the week, always because he got into trouble somehow with someone or with one of the teachers* (Appendix A, David's father, p. 271).

Asaf's mother also reported on her son's unruly behaviour and on the fact that he is asked to leave the class:

> *Also **at school he fights with his classmates and is asked by the teacher to get out of the class quite often*** (Appendix A, Asaf's mother, 272).

Donna's mother reported that her daughter does not listen to the teacher and hardly had any friends:

> ***She rarely listens to what the teachers tell her to do and she refuses to do homework. She hardly has any friends*** (Appendix A, Danna's mother, p. 272).

Edo's mother reported that:

> *...**at school he gets into fights with other children almost daily*** (Appendix A, Edo's mother, p. 272).

The dominant theme that emerged in **'the child in school'** category was the disciplinary problems these children struggled with. At the root of these problems was the frequent fighting with classmates, the refusal to listen to the teacher's instructions and having no friends. Internal validity for these findings was high.

4.2.1.4 Parent Reports on the Effectiveness of THR on the Child:

Nine of the ten parents that were interviewed reported that they **did not see a change in their child's behaviour at home or at school following the horseback riding sessions.** One parent stated that his son's self-esteem is higher and that he is less violent.

Gilli's mother said that she does not see any changes at home:

> *He is a different child here [at the farm] than at home...* ***I don't see any changes at home or in school*** *and he is riding here for six months* (Appendix A, Gilli's mother, p. 271).

Also David's mother stated that she does not see changes:

> ***I don't see changes.***..(Appendix A, David's mother, p. 271).

Asaf's father concurred:

> *I* ***don't see changes****. Maybe there are. I cannot say what they are exactly, but he is happier, but mostly here, around the horses* (Appendix A, Asaf's father, p. 272).

Both Danna's mother and Edo's mother reported similar patterns of behaviour:

> *...once she is back home, or at school* ***she goes back to her usual behaviour*** (Appendix A, Danna's mother, p. 272).

> *We* ***don't see much of a change*** *except for the fact that we see that he loves to come here and be around the horses* (Appendix A, Edo's mother, p. 272).

The internal validity of these findings was high.

Only Ronen's father reported that he saw some changes:

> *Ronen loves to come here and his achievements with the riding raised his self-esteem and he is less angry also at home and in school* (Appendix A, Ronen's father, p. 273).

4.2.2 Observations

Data was collected from ten THR sessions using non-participatory observations conducted at 7, 15, and 25 minutes in the session (all together 30 observations) (Appendix C, pp. 274-276). The data showed that the THR framework elicited calmness in ten children out of ten who were calm during the whole session. In nineteen out of the 30 observations the children observed showed that they were willing to follow instructions. In thirteen out of the 30 observations the children showed ability to focus on the task at hand, and in eleven out of the 30 observations the children showed the ability to concentrate. In twelve out of the 30 observations the children demonstrated organisation while riding. In only three out of the 30

observations the children demonstrated being happy while riding and only in 9 out of the 30 observations there was evidences for positive interactions between THRPs and their clients.

In general, the data supported the perceptions of interviewed parents (10 out of 10) that the clients were calm on the farm, that they followed instructions and were able to concentrate while riding. The internal validity of the interview data and of the observations was high regarding the clients' calmness while on the horse, his ability to concentrate and keep that concentration during the 30-minute sessions and his willingness to follow instructions.

No support was found in the observation data that the client felt good during the THR sessions. Intuitive evidence emerged regarding the ineffectiveness of the THR sessions and their inability to support the transfer of skills learned during THR and regarding the sustainability of learning processes elicited by THR. This evidence was supported by parent interviews (9 out of 10) that claimed that apparent gains made during THR were not transferred to the home and school.

4.2.3 THRPs Perceptions of THR

Observations and interviews were conducted in four different THR schools. For the interviews I have prepared eight questions (Appendix D, pp. 277-290) and there were additional questions that were asked for further clarification (Clarification questions appear in Appendix D and are marked with *), when the situation demanded it.

Interviews conducted with ten senior THR practitioners revealed that all the THR practitioners worked on riding skill programmes based on an automatic schedule they had learned during their certification courses and with which they were comfortable. No standard riding programme was used, each practitioner favouring the programme he had been taught. The programmes were not adapted to the specific child's challenges and needs. None of the THR practitioners demonstrated an understanding of therapeutic goals.

In one of the horseback riding schools that had a THR programme an inspection by the representative of one of the major medical policy underwriters triggered an adjustment in the maintenance of client THR records. When a new child was accepted into the programme, the personnel conducting the Intake listed therapeutic goals on the form. The child did not participate in the intake and therefore did not validate the therapeutic goals.

THR practitioners were asked to record the child's subsequent progress and development toward these therapeutic goals. However all (ten out of ten) THR practitioners were unwilling to make adjustments to their lesson plans or to make, in depth notes regarding the child's progress on the client's THR records. All THR practitioners (ten out of ten) considered a THR programme to be effective if a child learned how to ride and reported that he had a "good time" on the horse. When describing the child's progress in the THR programme THR practitioners made reference to the child's riding skills and did not refer to therapeutic goals. None of the THR practitioners interviewed was aware of the importance of the transfer of skills clients acquired during THR sessions to other learning environments and none thought about facilitating the transfer of these skills. None of the THR practitioners worked with parents and teachers of their client. All THR practitioners (ten out of ten) agreed that parents should be forbidden to approach the riding area. The internal validity of these findings was very strong.

4.2.4 Themes that Emerged from the THRPs' Interviews and Observations:

An analysis of the data from observations, conducted during THR sessions and from the interviews with THRPs was conducted in an attempt to reveal the main characteristics of the THR process from the THRPs point of view (Appendix D, pp. 277-290). The themes that emerged were: therapeutic skills and objectives, the principles of the therapeutic process and the participants in the process of Therapeutic Horseback Riding.

Figure 4:

The Categorisation of THRP Responses

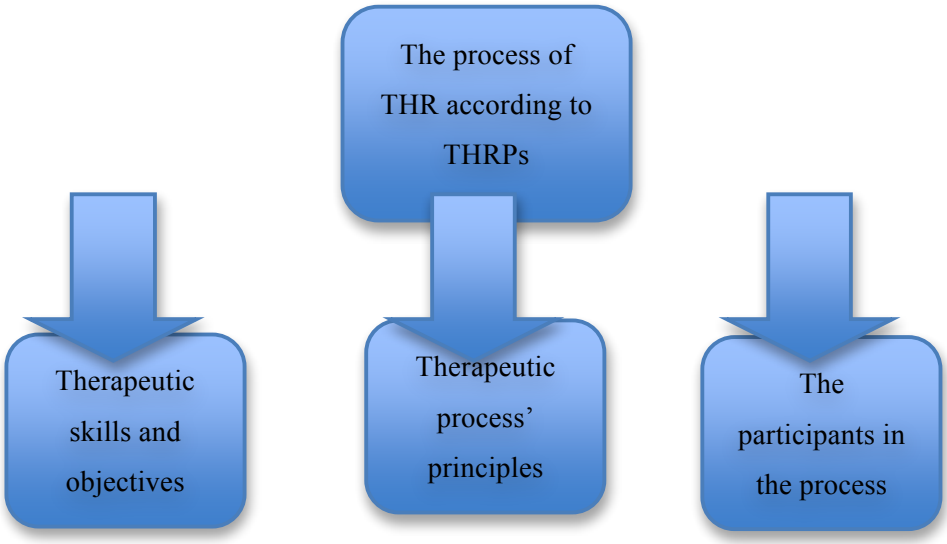


Figure 4 presents the process of therapeutic horseback riding according to the therapeutic horseback riding practitioners whom I have interviewed during the pilot stage of this research (Appendix D, pp. 277-290). From the practitioners responses three sub-categories emerged: Therapeutic skills and objectives, Therapeutic process' principles, The participants in the process. Each one of theses sub-categories will be presented below.

4.2.4.1 Therapeutic Skills and Objectives:

THRPs see themselves as responsible for **teaching riding skills** and making sure that the child is **having a good time**. When these two conditions are met THRPs believe that the child will feel **empowered** and will gain in self-confidence. According to their reports:

> *The goal of therapeutic horseback riding is to **empower** the child. This is the aim of THR. This is the essence…by teaching riding skill…* (Appendix D, Sam's interview, Q1, p. 277).

Amos also talked about empowering the child:

> *The aim of THR is to **empower** the child in what he needs with the help of the horse…*(Appendix D, Amos's interview, Q1, p. 280).

Shiri talked about developing the child's self-confidence:

> *The main THR aim is to develop the child's **self-confidence*** (Appendix D, Shiri's interview, Q1, p. 283).

Sheila included the child's confidence and empowerment as the main aim of THR:

> *The main aim is to lift the child's **confidence**, to **empower** him, to have fun and pleasure* (Appendix D, Shila's interview, Q1, p. 286).

Vivian also talked about teaching the child to ride and about the importance that the child has fun:

> *The aims are changing from client to client. I need to know what the problem is and to plan the lesson accordingly…I need to match a horse to the child so that the child can manage the horse, learn how to ride and have fun…* (Appendix D, Vivian's interview, Q1and Q2 p. 287).

Amy spoke about a holistic therapy approach that she favored putting the emphasis on helping people with physical limitations:

> *I see THR as a holistic therapy, which can be used to help people with various limitation, especially physical limitations. We need to make sure that the client feels good and wants to come back* (Appendix D, Ami's interview, Q1, p. 288).

The internal validity of these findings was strong.

4.2.4.2 The Principles of the Therapeutic Process According to the THRPs:

The **relationship** between the child, THR practitioner and the horse is a very important principle according to THRPs:

> *Therapy starts with the relationship between the child and me and the horse. It is a triangular relationship. A good interaction between*

> *the three is the basis for every therapy*…(Appendix D, Amos's interview, Q2, p. 281).

> *I connect with them (the children)… I build the relationship with the child, the horse and me. I want the child to connect with the horse* (Appendix D, Shiri's interview, Q1, p. 283).

Positive interaction, positive environment, positive feedback and **respect** are important principles that the practitioner needs to facilitate:

> …***positive interaction…positive feedback*** *on a good job…a lot of* ***respect*** *to the child and the horse.* (Amos's interview, Appendix D, Q2, p. 281).

> *I create a* ***positive environment*** *for the child, a place that the child would like to come to…I give the child positive reinforcements* (Shiri's interview, Appendix D, Q1, p. 283)

A THRP needs to show the child that he cares about him. This can be achieved by asking the child questions about his life

> *…like what he likes to eat, what is his favorite color, who is his best friend and so on. This way he knows that I care for him…* (Amos's interview, Appendix D, Q2, p. 281).

> *I talk to the child. I ask the child how he feels, so he knows that I care about him* (Shiri's interview, Appendix D, Q1, p. 283)

A THR instructor needs to have a different attitude when dealing with clients who come for therapy than he has towards others who come to just learn how to ride. He

> *…needs to be sensitive to the child and to know how much and how far you can challenge the child* (Amos' Interview, Appendix D, Q4, p. 282).

The internal validity of these findings was high.

4.2.4.3 The Participants in the Therapeutic Process According to the THRPs: The horse and the parents

The Horse:

THRPs see the horse as playing a major part in the therapy:

> ***The horse*** *is the main tool of the therapist, an excellent mirror* (Sam's interview, Appendix D, Q3, p. 278).

> ***The horse*** *is very important. The horse shows us the best way to treat the child* (Amos's interview, Appendix D, Q3, p. 281).

The horse *has a major role* (Shila's interview, Appendix D, Q3, p. 286).

These findings repeated themselves and showed strong internal validity.

<u>The parents</u>:

THRPs think that the parents should not be part of the therapy. They ask the parents not to be around the arena when the child is on the horse and they do not involve the parents in the process of therapy:

> *The THRP asked the father to leave the place. The father left, but returned after a while. The THRP went to the father and asked him to leave* (Observation 1, Appendix B, 273).

The parents have no role in the therapeutic process. Their role is to bring the child to the farm:

> *...all I want from them (the parents) is that they make sure that the child is here every week. I do the rest with the child and the horse* (Sam's interview, Appendix D, Q7, p. 280).

No parents are mentioned as participants in the therapeutic process

> *Therapy starts with the relationship between the child and me and the child and the horse* (Amos' interview, Appendix D, Q2, p. 281).

And,

> *I do not get the parents involved in the process* (Shiri's interview, Appendix D, Q2, p. 284).

The internal validity of these findings was strong.

The results of the exploratory interviews were used in the design of a THR Manual for THR practitioners working with clients challenged by ADHD. The Manual includes a standardised form for the conduct of an Intake session and guides the THR practitioners on how to facilitate the process of arriving at an agreed upon therapeutic vision and therapeutic goals consistent with the child's challenges.

The Manual guides THR practitioners on how to build meaningful strategic partnerships with the child's parents and his teachers and how to facilitate the

transfer of the skills and learning strategies learned during THR to other learning environments at home and at school. The KTR model of THR emerged during the preparation of the manual.

Figure 5

THR According to the KTR model

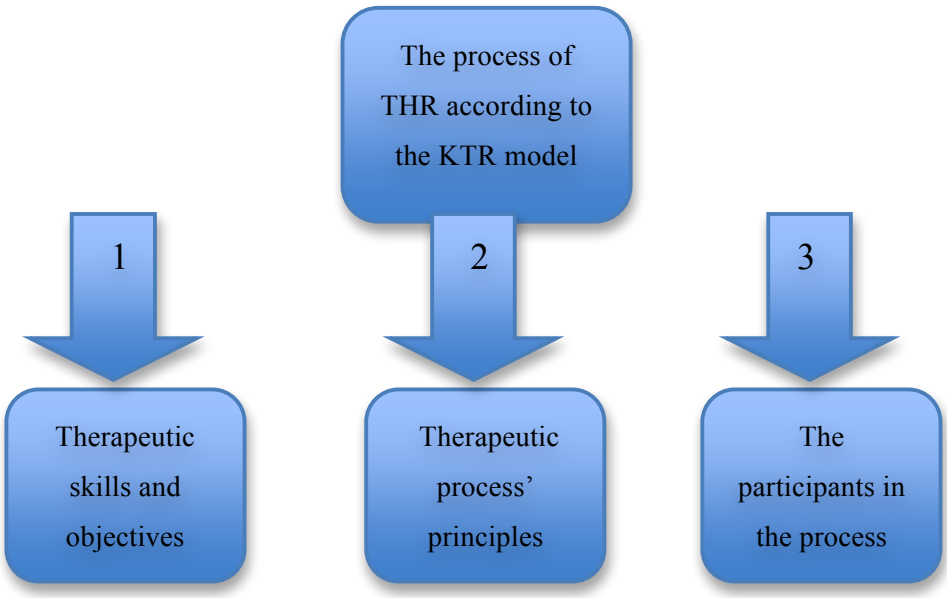


Figure 5 shows the process of THR according to the KTR model.

4.3 Findings Collected During Stage 3 from THR Experts:

During Stage 3 the THR Manual was presented to three THR experts. The experts were asked for thematic feedback (see Table 2, p. 141). Once the feedback was collected, action was taken to amend the THR Manual accordingly (see Table 3, p. 141).

Table 2:

Questions and feedback received from THR experts

Questions asked	Expert 1: answer	Expert 2: answer	Expert 3: answer
1. What themes needed additional attention and in what area?	More attention needs to be paid to the learning of skills.	Need to show the difference between therapeutic objectives and therapeutic vision.	Need to broaden the discussion of ethical considerations that apply to THR programme.
2. What themes were not addressed?	Need more examples of questions eliciting reflection.	Cannot think of any.	There is no discussion of group work.
3. What themes are unnecessary?	Could not think of any.	In my opinion too much space was allocated to the technicalities of ADHD diagnosis.	Could not think of any

Table 3:

Actions taken in response to expert's feedback.

Experts	Question #1	Question #2	Question #3
1. 'S'	A chapter was added about the learning of skills.	Examples of questions eliciting reflection were added.	No action was necessary.
2. 'Y'	Definition of therapeutic objectives and therapeutic vision and the relationship between them was emphasised.	No action was necessary.	The ADHD diagnosis section was reduced.
3. 'J'	A sub section of ethical considerations applicable to THR was added	No action was taken. The manual is intended for THR to be conducted according to the regulations of major medical insurance companies who subsidise individual therapy and not group sessions.	No action was necessary.

4.4 The THR Manual and the Synthesis of the KTR model:

According to the THR Manual valuable information should be collected during the Intake of new clients, which will be the basis for the formulation of the therapeutic vision and objectives. This information will be collected with the help of certain forms: an Intake Form that inquires into the background of the child, an ADHD Inventory Form, A Self-Esteem Questionnaire and the first Weekly Parent's Report. In addition the parent was asked to sign an agreement to participate in the research and a waver of confidentiality.

4.4.1 Applying the Manual in 3 cases:

The manual was applied in the THR programme in 6 cases of children aged nine to twelve years of age. Of the 6 cases that were enrolled in this programme, 3 clients dropped out because the major medical insurance provider stopped its subsidy payments and they could not afford to pay for the therapy on their own. Following is information about each of the participants, the background, the planning of the first set of sessions according to the therapeutic objectives that were chosen for therapy, the initial ranking of the therapeutic objectives received from the client and his parent and from their home class teacher and the scores they received during the sessions they completed. In addition, I am presenting data collected with the help of the Parent's Weekly Report Questionnaire, the Teacher's Reports and the child's successes lists.

The three cases that are presented below are those of the children that completed the THR programme, the cases of Hillary, Saul and Terry (fictitious names assigned to the cases).

4.4.1.1 Hillary's Case Study:

Hillary was diagnosed with ADHD by a neurologist who recommended Therapeutic Horseback Riding (THR) a month before she turned nine years old. When Hillary started THR she was the third child in her family. She had two older brothers aged 14 and 11, and two younger sisters aged 7 and 3. A baby boy was born about 5 weeks after the THR sessions started. The family had Major Medical Insurance. The

Major Medical Insurance policy had a clause that provided for subsidised THR therapy.

Hillary was a third grade student. When she was in second grade she experienced difficulty in school and at home. As a consequence her parents sought medical help. Hillary's family doctor referred her to a neurologist. The neurologist diagnosed Hillary as having ADHD.

Upon arriving at the horse farm, Hillary and her mother were introduced to the therapeutic setting and were invited to join the study group. The research procedure was explained in detail and once Hillary and her mother showed a clear grasp of the research procedure and the ethical constraints under which the THR sessions were to be delivered, consent was solicited and obtained.

Hillary is a lovely girl, friendly, talkative and cooperative. During our first meeting, the Intake procedure was followed and Hillary and her mother completed the ADHD questionnaire (Table 9, p. 152), the Self Esteem Questionnaire (Table 10, p. 153) and the first Parents Weekly Report (Table 4 p. 144 and Appendix F.1, pp. 291-294). The data collected was examined and was used to formulate therapeutic objectives and a strategy emerged on how to prioritise these objectives. This strategy was presented to Hillary and to her mother for approval and so that they could formulate a therapeutic vision.

Planning Hillary's First Set of Sessions.

Following the intake procedure and based on the therapeutic goals that were prioritised by both mother and child, and later confirmed by data collected from Hillary's teacher (Table 4, p. 144, and Appendix F.2, pp. 294-295), I proposed that we start therapy with 'a unit of work' on **difficulties with following verbal instructions.** On this particular skill Hillary had indicated a score of 10 (on a Likert Scale from one to ten with 10 being "having the most difficulty" – Table 9, p. 152).

From the data collected with the ADHD questionnaire, (Table 9) the parents and teacher reports (Table 4, p. 144) emerged additional therapeutic objectives, which

were validated by Hillary. These objectives are presented bellow in the order of their perceived importance:

The score of 9 was given to difficulties in **organising her work or her room, postponing tasks that needed to be done,** reported **difficulties in starting things, getting hurt emotionally easily,** and **getting bored easily.** The score of 8 was given to being **easily distracted, missing listening skills,** and **getting frustrated easily.** The score of 7 was given to **tends to get distracted and stops what she is doing, has a low and negative self image** and has **difficulties in making and keeping friends.** The score of 6 was given to **having extreme mood swings,** from feeling good to feeling bad and vice versa (Table 9).

The mother emphasised that Hillary had anger outbursts, sometimes it seemed for no reason at all. The mother said that she did not know what to do in those cases.
The mother also indicated that Hillary wets her bed (nocturnal enuresis) quite frequently, three to four times every week.

Using the data collected from Hillary's teacher, who completed The Teacher Periodical Report Questionnaire, and the data collected from Hillary's mother, who completed the Parent Weekly Report Questionnaire, it was possible to construct the following comparison table. Both questionnaires were quantitative questionnaires and the two participants gave very similar scores on the Likert scales (1 being the lowest, 5 being the highest score) in their respective reports.

Table 4

The Comparative Mapping of Hillary's Therapeutic Objectives From the Teacher's and Mother's Perspectives (before starting therapy)

ADHD Symptom	Teacher	Mother
Organisation	2	2
Concentration	2	2
Focused (not distracted)	1	1
Relaxed (does not fidget)	3	3
Calm (no anger outbursts)	4	2
Self-confidence	2	3
Self-image	2	3
Sum	16	16
Average	2.3	2.3

Table 4 shows the comparative mapping of Hillary's therapeutic objective from the teacher's and the mother's perspectives before starting therapy. The teacher's and the mother's scores had the same average value. The teacher gave a score of 4 for Hillary being calm in school, while the mother gave only 2 for Hillary being calm at home. Verifying the discrepancies, the teacher reported that Hillary is calm in school while the mother reported that Hillary has anger outbursts at home almost every day.

Self-Esteem Questionnaire:

Hillary was asked to complete a Self-esteem Questionnaire (Table 10, p. 153). She was asked to describe herself in comparison to another child by using nominal scales. The descriptions she used for herself were: a nice girl, hardly participating in the lessons in school, wants to be appreciated as a good pupil, knows a little in different subjects, not loved by her class mates, when she speaks other children hardly listen to her, children want 'very little' to play with her, does not have many friends, and the friends she does have do not want to do what she asks them to do, it is important for her to get good grades, is talented in studding, and has good ideas.

The therapeutic objectives once prioritised, found their expression in a detailed plan for Hillary's first set of therapeutic horseback riding sessions.

The First Lesson: A unit of work on '*following verbal instructions*'.

Our first session started with my demonstration of how to brush a horse. Following my demonstration and step-by-step explanation I asked Hillary to brush the horse. I watched her brushing the horse to determine if she was following instructions regarding her choice of brushes to be used and in what order, the direction of brushing, the pressure applied, the attention that has to be paid to the horse's reaction to the brushing and the tone and amplitude of the voice used while addressing the horse. By observing the child during the brushing exercise, I was able to determine if instructions were followed precisely and if the child exhibited

any fear during the first close encounter with the horse. Hillary showed no fear of the horse and followed instructions very well. Hillary received positive feed back from me on her performance and on her ability to follow instructions precisely. I said to her: *"Great! You did it! You did it very well", and we did a 'high five'"* (Research Diary, Appendix F.4, Nov. 23, 2011, p. 299).

Next, we saddled the horse and went to the arena. We continued to work on ***following verbal instructions,*** which as mentioned before was the challenge she ranked as most difficult. I instructed Hillary on how to mount the horse and she followed my instructions exactly and mounted the horse. On the successful completion of this task I commented that she had followed my instructions well and noted her success in mounting the horse. A similar procedure was followed on instructing her on how to dismount. In both cases Hillary succeeded to focus on me when I gave her instructions and followed these instructions precisely while mounting and dismounting, thus completing her tasks very well. Hillary received positive verbal reinforcement upon the successful completion of tasks. The connection between ***'following instructions'*** and being able to successfully complete tasks was pointed out and the chain of behaviours 'listen to instructions', 'understand them', 'verify them', 'carry them out and seek feedback', was highlighted. She was encouraged to reflect upon this successful meta-cognitive strategy. Following the delivery of the reinforcement and the practice of reflective thinking, I paused and made sure that I was heard and understood. I waited until I received either a nod or a confirming verbal response. For example: *'Yes I know I did it right'* or *'I did it! I did it! I understood right away!"(*Research Diary, Appendix F.4, Nov 23, 2011, p. 299).

Next we worked on moving forward and stopping the horse by using a specific verbal code, which the horse was trained to follow. Hillary showed signs of concentration when listening to the command sounds and repeating them for verification. She succeeded in both tasks. She used the verbal commands appropriately and at the right pitch. Again she received immediate reinforcement and the connection between being focused when receiving instructions and being precise when following the instructions, was pointed out by me after each completed task of moving the horse forward and coming to a full stop. The meta-

cognitive strategy of reflecting upon successfully completing tasks was repeated and reviewed again

This exercise was repeated six times. During the last sequence I instructed Hillary to complete a set of complex instructions: move the horse forward, complete a turn around the arena and stop the horse at the point where its forward motion had started. I did not repeat the instructions and held my response to her success till she had completed the task. I reinforced her success on the complex task as a whole. In addition when she stopped the horse, I asked Hillary ***'where else do you need to stop like this, when you are outside the arena?'*** Her reply was quick*:* ***"I need to stop my anger"***. '*If you can stop this huge horse whenever you want to, it should not be difficult for you to stop your anger from flaring up'* I said. '*Do you agree?'* '*Yes! I can do this! I did it on my own!'* (Research Diary, Appendix, F.4, Nov.23, 2011, P. 299).

The next exercise was slightly more complex. It required that Hillary listen to a longer string of verbal instructions and complete a task that required the use of verbal commands to move and stop the horse, fasten a throwing ring to the saddle, plan ahead the positioning of the horse next to a cone situated in the arena, direct the horse in the arena and perform a task while the horse was standing next to the cone.

The task was linear but certainly more complex. It involved body control – holding reins in one hand while receiving the throwing ring from me and fastening the throwing ring to the saddle and later unfastening the throwing ring from the saddle and throwing it on to the cone. In addition Hillary had to remember the string of instructions and perform her task without additional prompting from me.

Hillary succeeded in that task as well. In addition to the verbal reinforcements she received when she completed her task I pointed out to her that in order to reap that success she had to concentrate, be organised, and plan her moves, which she succeeded in very well. I asked her to mention a few tasks that she needed to do at home, where she also needs to use all these skills: concentration, organisation and planning. Hillary talked about getting ready for bed in the evening, preparing her school back-pack, pack according to her lesson plan and choose her clothes for the next day and, of course getting up in the morning and getting ready for school.

At the end of the session Hillary was given homework. She was asked to bring a list of tasks that she needed to complete where she used the skills we worked on during our first lesson. In addition she was asked to make a list of all her achievements and successes each day in school and at home for a week and bring it to her next therapeutic horseback riding session. This task required analysis, evaluative skills and reflection on practice and during practice.

During this first session Hillary spent only 20 minutes on the horse during which she practiced mounting and dismounting, left and right turns, moving forward from stand still positions and stopping the horse by using verbal commands and completing a complex exercise that combined these newly learned behaviours. Judging from the evidence presented in Hillary's mother's weekly report, Hillary had made major changes already after her first session on the farm.

The Effect of Therapeutic Horseback Riding as Reported by: Hillary's Mother, Teacher and Hillary.

Following the completion of ten THR sessions the weekly collected data was compiled and analysed.

The mother reported that there was a significant change in all ADHD symptoms. Table 5 is showing the progress according to the mother's Weekly Reports.

Table 5:

Summary of Hillary's first 10 sessions progress from the mother's perspective

#	Weeks/ Therapeutic Objectives	1	2	3	4	5	6	7	8	9	10
1	Organization	2	3	3	4	4	4	4	4	4	4
2	Concentration	2	3	4	3	4	4	4	4	4	4
3	Focused (not distracted)	1	2	4	3	3	4	3	4	4	4
4	Relaxed (does not fidget)	3	3	4	4	4	4	4	3	4	4
5	Calm (no anger outbursts)	2	3	3	3	3	3	3	4	3	4
6	Self-confidence	3	4	3	4	4	4	4	4	4	4
7	Self-image	3	4	4	4	4	4	4	4	4	4
	Sum	16	22	25	25	26	27	26	27	27	28

Table 5 shows the summary of Hillary's achievements on each of her therapeutic objectives during the first 10 sessions. Hillary scored 4 in all the therapeutic objectives that their starting scores were 1, 2 or 3. The average score went up from 2.3 to 4. After 10 weeks from our first therapeutic riding session the table looked like this:

Table 6

The comparative mapping of Hillary's therapeutic objectives from the teacher's and mother perspectives, after 10 sessions.

ADHD Symptom	Teacher	Mother
Organisation	4	4
Concentration	3	4
Focused (not distracted)	4	4
Relaxed	4	4
Calm (no anger outbursts)	4	4
Self-confidence	4	4
Self-image	4	4
Sum	27	28
Average score	3.86	4

Table 6 is showing the comparative mapping of Hillary's Therapeutic Objectives from the teacher and mother's perspectives, after the completion of 10 sessions. There is a change in all-therapeutic objectives, in school and at home. The average score went up from 2.3 to 4.0 from the mother's perspective and from 2.3 to 3.86 from the teacher's perspective.

Table 7

Summary of Hillary's next 10 sessions Progress by Her Therapeutic Objectives: (During session 11 to the 20th session)

#	Weeks/ Therapeutic Objectives	11	12	13	14	15	16	17	18	19	20
1	Organization	3	4	5	5	5	3	4	5	4	4
2	Concentration	4	4	4	4	4	4	4	5	4	4
3	Focused (not distracted)	4	4	4	4	4	4	4	4	4	3
4	Relaxed (does not fidget)	4	4	4	4	4	4	3	4	4	3
5	Calm (no anger outbursts)	4	4	3	3	5	3	4	4	5	4
6	Self-confidence	4	4	3	4	5	3	4	4	5	5
7	Self-image	4	4	4	4	5	4	4	4	5	5
	Sum	27	28	27	28	32	25	27	30	31	28
	Average Score	3.9	4	3.9	4	4.6	3.6	3.9	4.3	4.4	4

Table 7 is showing Hillary's progress toward reaching her therapeutic objectives from the mother's perspective. The data was collected from the mother's weekly reports from the 11th session to the 20th session. The average score of 4 was maintained. Hillary's self-confidence and self-image went up from an average score of 4 to the score of 5. As it can be seen from the table, Hillary's behaviour is dynamic. Hillary is showing progress as well as difficulties. The general tendency is continuing improvement.

Table 8

Summary of Hillary's next 10 sessions: Progress from the Mother's Perspective (During session 21 to the 30th session)

#	Weeks/ Therapeutic Objectives	21	22	23	24	25	26	27	28	29	30
1	Organization	4	4	5	5	5	4	4	5	4	4
2	Concentration	4	4	4	4	4	4	4	4	4	4
3	Focused (not distracted)	4	4	4	4	4	4	4	4	4	4
4	Relaxed (does not fidget)	4	4	4	4	4	4	3	4	4	4
5	Calm (no anger outbursts)	4	4	4	4	5	5	4	4	5	5
6	Self-confidence	4	4	5	5	5	5	4	4	5	5
7	Self-image	4	4	5	4	5	5	4	4	5	5
	Sum	28	28	31	30	32	31	27	29	31	31
	Average Score	4	4	4.4	4.3	4.6	4.4	3.9	4.1	4.4	4.4

Table 8 is showing Hillary's progress from the mother's perspective during the period spanning sessions from the 21st session through the 30th session. The average score of 4 achieved during the 20th session went up to 4.4 by the end of the 30th session. Her most difficult skill to mange was the control of anger outbursts. This skill received a score of 2 at the start of therapy. Following 30 sessions of therapy, the table shows that Hillary improved dramatically and received the score of 5, which is the highest score possible.

Table 9

Hillary's ADHD inventory: before therapy started and after 30 sessions
On a scale from 1 (being the lowest) to 10 (being the highest)

ADHD Symptoms	Scores before treatment	Scores after 30 sessions
1. Capable of concentrating for	5 minutes	15 minutes
2. Easily distracted	8	4
3. Difficulties listening to verbal instructions	10	3
4. Difficulties in learning new games and new skills	1	1
5. Does not know how to listen	8	3
6. Difficulties in sitting quietly in one place for more than	5 minutes	15 minutes
7. Difficulties in communication skills	4	1
8. Impulsive	5	3
9. Gets bored easily	9	3
10. Difficulties in following verbal instruction	10	3
11. Difficulties in organising work or the room	9	5
12. Delays doing things need to be done	9	5
13. Difficulties in starting things	9	5
14. Starts doing things but does not finish	8	3
15. Does not finish homework	8	6
16. Inconsistent appearance	3	2
17. Tends to be diverted	7	3
18. Difficulties in self image	7	3
19. Difficulties in keeping friends	7	5
20. Avoiding group activities or sporting events	1	1
21. Gets angry easily	8	6
22. Has difficulties falling asleep	8	3
23. Has difficulties waking up	8	3
24. Often tired	3	1
25. Mood swings	6	2
26. Difficulties in planning activities	8	3
27. Gets hurt easily	9	3
28. Gets frustrated easily	8	3
29. Often has behavioural problems in school	1	1

Table 9 is showing Hillary's ADHD inventory, before therapy started and after 30 sessions. The table shows that Hillary improved in all her difficulties.

Table 10

Hillary's self esteem score before (B) THR sessions and after (A) 30 session:

	This child	I am definitely like him/him	I am like him/her	I am a bit like him/her	I am not so much like him	I am definitely not like him/her
1	Is nice	B and A				
2	Participates a lot in school		A		B	
3	Wants to be appreciated as a good student	A	B			
4	Knows a lot on different subjects		A	B		
5	Loved by his/her classmates		A		B	
6	It is important for him to receive good grades	A	B			
7	Is talented in studding	A		B		
8	Has good ideas	B and A				
9	Makes sure that he/she is not late for class	B and A				
10	You can learn a lot from him/her	A	B			
11	When he speaks, other children listen to him/her	A		B		
12	His/her classmates like to play with him/her		A	B		
13	Is a good student		B and A			
14	Is shy to ask when he/she does not understand		B			A
15	It is very pleasant to be with this child	A		B		
16	Knows how to prepare a topic and to tell about it in class	A		B		
17	Knows how to express himself	B and A				
18	Has many friends		A		B	
19	Has a great influence on his/her classmates		A		B	
20	His/her ideas are accepted by his/her friends		A	B		
21	Is a good student		B and A			
22	It is beneficial to study with him for exams		A	B		
23	His/her classmates do what he/she tells them			A	B	
24	Is very smart	B and A				
25	Makes friends easily	A			B	

Table 10 is showing Hillary's evaluation of her own self-esteem before therapy and after 30 sessions. The table is showing that Hillary is evaluating herself higher at the end of 30 sessions.

4.4.1.2 Saul's Case Study

Saul was diagnosed by a neurologist as having ADHD when he was 8 years and 3 months old. He had behavioural difficulties, a very low frustration threshold and needed immediate gratification for his needs. The neurologist recommended Therapeutic Horseback Riding (THR) and family therapy. The family had a major medical insurance policy, which subsidised THR therapy.

The family, Saul and both his parents, came for an intake when Saul was 8 years and 9 months old. They had heard about the research from their family therapist and asked to join in. Saul was accepted to the programme based on the neurological diagnosis and on the family therapist's recommendation. Both the diagnosis and the family therapist's recommendation stated that Saul functions on a high level both verbally and academically. The research procedure was explained in detail and once Saul and his parents showed a clear grasp of the research procedure and the ethical constraints under which the sessions were conducted. Consent was solicited and obtained.

Saul was the oldest child in a family of 4. He had a younger brother aged six and a half. Saul was in third grade. From the teacher's report it appeared that Saul functioned very well on the academic level. He was very good in reading and comprehension, had a large vocabulary and he wrote very well. Saul was very good in math and in general knowledge. His parents added that Saul loved to read books and that he read a lot. According to the teacher's report Saul was a friendly child, very active in class and had many friends, but did not have a close friend. The children in his class made fun of him. According to the neurologist's report, Saul complained that he had no friends in his class and that no one wants to talk to him and play with him.

According to the teacher's report Saul is a restless child, moves constantly in his seat and it is hard for him to sit in class peacefully. In addition, Saul often behaves without thinking about the results of his actions, disturbs other children in the class, makes noises, is very sensitive and gets insulted easily, has difficulties in concentration, is influenced easily by others, does not understand fair play, blames others for his failures and has extreme mood swings. According to the teacher ***"this behaviour keeps Saul from reaching his potential"*** (Appendix G.2, p. 307-308).

Planning Saul's First Set of Sessions.

Following the intake session and based on the therapeutic goals that were prioritised by both parents and child, and confirmed by data collected from Saul's teacher, it was decided that therapy would start with 'a unit of work' on: **concentration and impulsivity.** Impulsivity was described as unsafe behaviour undertaken without thought about its results and verbal expressions which once said, he felt sorry for having said them**.** These skills Saul had ranked (Table 16, p. 160) as 'high priority' assigning to them a rank of 10 (on a Likert Scale from one to ten with 10 being 'having the most difficulty with').

Other therapeutic objectives in the order of their perceived importance were:

The score of 10 was given to: **tends to postpone** doing tasks that need to be done, does **not complete** homework or other chores he is assigned, **gets angry easily** and **often has severe behavioural problems in school.** Based on the data collected with the ADHD questionnaire the following therapeutic objectives were identified: The score of 9 was given to **difficulties in starting things** and **difficulties in getting up in the morning**.

The score of 8 was given to **difficulties in listening to verbal instructions, difficulties in performing verbal tasks, problems with self image, difficulties in planning activities or tasks**, **gets frustrated easily.** The score of 7 was given to **inconsistency in his appearance** and **his performances in school.**

The score of 6 was given to **missing listening skills, gets bored easily** and **gets tired often.**

Using the data collected from Saul's teacher, who completed The Teacher Periodical Report Questionnaire, and the data collected from Saul's parents, who completed the Parent Weekly Report Questionnaire, it was possible to construct the following comparison table. Both questionnaires had identical Likert scales with values ranging between 1 to 5 (1 being the lowest, 5 being the highest score).

Table 11:

The Comparative Mapping of Saul's Therapeutic Objectives From the Teacher's and Parents' Perspectives

ADHD Symptoms	Teacher	Mother and Father
Organisation	5	2*
Concentration	2	2
Focused (not distracted)	3	1
Relaxed (does not fidget)	2	2
Calm (no anger outbursts)	1	1
Self-confidence	5	5
Self-image	5	4
Sum	23	17
Average score	3.3	2.4

Table 11 is showing the comparative mapping of Saul's therapeutic objectives from the teacher's and the parents' perspectives. On 'organisation' the parents gave the score of 2, while the teacher gave the score of 5. Due to the striking difference I verified the mother's and the teacher's responses and was told by the mother that Saul, in general, was an organised boy. He kept his room neat and took very good care of his books and toys, but in the mornings it was very hard for Saul to get organised for school and leave the house. This is the reason the parents gave the low score of only 2 for 'organisation'. The teacher confirmed her rating of Saul's organisation skills.

Table 12

Summary of Saul's Progress by His Therapeutic Objectives During the first session to the 10th

#	Weeks/ Therapeutic Objectives	1	2	3	4	5	6	7	8	9	10
1	Organization	2	3	3	4	4	4	4	4	4	4
2	Concentration	2	4	4	3	4	4	4	4	4	4
3	Focused (not distracted)	1	2	2	3	3	4	3	4	4	4
4	Relaxed (does not fidget)	2	3	3	4	4	4	4	3	4	4
5	Calm (no anger outbursts)	1	4	5	5	5	5	5	4	4	4
6	Self-confidence	5	5	5	5	5	5	5	5	5	5
7	Self-image	4	5	5	5	5	5	5	5	5	5
	Sum	17	26	27	29	30	31	30	29	30	30
	Average Score	2.4	3.7	3.9	4.1	4.3	4.4	4.3	4.1	4.3	4.3

Table 12 shows Saul's progress during his first ten sessions. Saul scored an average of 4.3 on his therapeutic objectives after ten sessions. The starting average was 2.4. After the 10th week of THR the table looked like this:

Table 13

The Comparative Mapping of Saul's Therapeutic Objectives From the Teacher's and Parent's Perspectives after 12 sessions

ADHD Symptom	Teacher	Mother
Organisation	5	4
Concentration	4	4
Focused (not distracted)	3	4
Relaxed	3	4
Calm (no anger outbursts)	4	4
Self-confidence	5	5
Self-image	5	5
Sum	30	30
Average score	4.3	4.3

Table 13 shows the comparative mapping of Saul's therapeutic objectives from the teacher's and parents' perspective. The teacher and the parents reported that Saul had improved on his concentration.

Table 14
Summary of Saul's Progress on Attaining his Therapeutic Objectives:
(from the 11th session to the 20th session)

#	Weeks / Therapeutic Objectives	11	12	13	14	15	16	17	18	19	20
1	Organisation	3	4	5	5	5	3	4	5	4	4
2	Concentration	4	4	4	4	4	4	4	5	4	4
3	Focused (not distracted)	4	4	4	4	4	4	4	4	4	4
4	Relaxed (does not fidget)	4	4	4	4	4	4	3	4	4	4
5	Calm (no anger outbursts)	4	4	3	3	5	3	4	4	5	4
6	Self-confidence	4	5	3	4	5	3	4	4	5	5
7	Self-image	4	5	4	4	5	4	4	4	5	5
	Sum	27	28	27	28	27	25	27	30	31	28
	Average Score	3.9	4	3.9	4	3.7	3.6	3.9	4.3	4.4	4.4

Table 14 is showing Saul's progress on attaining his therapeutic objectives from the parents' perspective from the 11th session to the 20th session. The average score of 4.4 that Saul had at the end of our 10th session was maintained till the end of the 20th session with changes in between. As it can be seen from the table, Saul's behaviour is dynamic. He is showing progress as well as difficulties. The general tendency is one of continuing improvement and maintenance of gains and momentum.

Table 15

Summary of Saul's Progress on Attaining his Therapeutic Objectives:
(from session 21 till session 30)

#	Weeks / Therapeutic Objectives	21	22	23	24	25	26	27	28	29	30
1	Organisation	4	4	5	5	5	4	4	5	4	4
2	Concentration	4	4	4	4	4	4	4	4	4	4
3	Focused (not distracted)	4	4	4	4	4	4	4	4	4	4
4	Relaxed (does not fidget)	4	4	4	4	4	4	3	4	4	4
5	Calm (no anger outbursts)	4	4	4	4	5	5	4	4	5	5
6	Self-confidence	4	4	5	5	5	5	4	4	5	5
7	Self-image	4	4	5	4	5	5	4	4	5	5
	Sum	28	28	29	28	32	31	27	31	31	31
	Average score	4	4	4.1	4	4.6	4.4	3.9	4.4	4.4	4.4

Table 15 is showing Saul's progress from the 21st session to the 30th session of his therapy programme. From session 25 and onward Saul kept the average score of 4.4, an indication that the changes made in his repertoire of skills were sustainable.

Table 16

Saul's ADHD inventory: before therapy started and after 30 sessions:

ADHD Symptoms	Scores before treatment	Scores after 30 sessions
1. Capable of concentrating for	5 minutes	15 minutes
2. Easily distracted	8	4
3. Difficulties listening to verbal instructions	5	3
4. Difficulties in learning new games and new skills	1	1
5. Does not know how to listen	8	3
6. Difficulties in sitting quietly in one place for more than	5 minutes	15 minutes
7. Difficulties in communication skills	4	1
8. Impulsive	5	3
9. Gets bored easily	9	3
10. Difficulties in following verbal instruction	10	3
11. Difficulties in organising work or the room	9	5
12. Delays doing things need to be done	9	5
13. Difficulties in starting things	9	5
14. Starts doing things but does not finish	8	3
15. Does not finish homework	8	6
16. Inconsistent appearance	3	2
17. Tends to be diverted	7	3
18. Difficulties in self image	7	3
19. Difficulties in keeping friends	7	5
20. Avoiding group activities or sporting events	1	1
21. Gets angry easily	8	6
22. Has difficulties falling asleep	8	3
23. Has difficulties waking up	8	3
24. Often tired	3	1
25. Mood swings	6	2
26. Difficulties in planning activities	8	3
27. Gets hurt easily	9	3
28. Gets frustrated easily	8	3
29. Often has behavioural problems in school	1	1

Table 16 is showing Saul's ADHD inventory, before therapy started and after 30 sessions. The table shows that Saul improved on all his therapeutic objectives and overcame his difficulties. An example for a dramatic improvement can be found in Saul's improved ability to follow verbal instructions. During Intake Saul had rated his difficulty in following verbal instructions at a high of 10 while at the end, after

30 sessions of THR he rated his 'difficulties in following verbal instruction' at a low of 3.

Table 17

Saul's self esteem score before (B) THR sessions and after (A) 30 session:

	This child	I am definitely like him/him	I am like him/her	I am a bit like him/her	I am not so much like him	I am definitely not like him/her
1	Is nice	A	B			
2	Participates a lot in school	B and A				
3	Wants to be appreciated as a good student	B and A				
4	Knows a lot on different subjects	B and A				
5	Loved by his/her classmates		A		B	
6	It is important for him to receive good grades	B and A				
7	Is talented in studding	A	B			
8	Has good ideas	B and A				
9	Makes sure that he/she is not late for class	B and A				
10	You can learn a lot from him/her	B and A				
11	When he speaks, other children listen to him/her		B and A			
12	His/her classmates like to play with him/her		A		B	
13	Is a good student	A	B			
14	Is shy to ask when he/she does not understand			B		A
15	It is very pleasant to be with this child		A	B		
16	Knows how to prepare a topic and to tell about it in class	B and A				
17	Knows how to express himself	A	B			
18	Has many friends		A		B	
19	Has a great influence on his/her classmates		A		B	
20	His/her ideas are accepted by his/her friends		A		B	
21	Is a good student	B and A				
22	It is beneficial to study with him for exams			A	B	
23	His/her classmates do what he/she tells them			A	B	
24	Is very smart	B and A				
25	Makes friends easily	A		B		

Table 17 is showing Saul's evaluation of his self-esteem before therapy and after 30 sessions of THR. The table is showing that Saul is evaluating himself higher at the end of 30 sessions of THR.

4.4.1.3 Terry's Case Study:

Terry was diagnosed with ADHD and with a Learning Disorder by her pediatrician and was recommended for Therapeutic Horseback Riding. Terry came for her first Intake session a month after she turned 9 years old.

Terry was the second child in the family. She had an older sister aged 12 and a younger brother, 5 years old. She was in third grade. She was born in the 40th week of pregnancy in a natural childbirth procedure requiring no interventions. She weighed 2.3 kg at birth. A baby sister was born to the family 5 weeks after we started horseback riding therapy.

Terry came for Intake with her father who reported that she has difficulties in listening, in concentrating and has anger outbursts when things don't go her way. According to the father Terry's older sister has similar symptoms. In addition, he showed me Terry's pediatrician's report, which stated that Terry has difficulties in learning, in reading and writing and in understanding what she reads. She also found it difficult to sit in class and to listen to what the teacher is saying. She is distracted easily, losing things from her school bag and she forgets to do what she was told. Terry is impulsive and hyperactive.

Upon arriving at the horse farm Terry and her father were introduced to the therapeutic programme and were invited to join the study group. The research procedure was explained to them in detail and once Terry and her father showed a clear grasp of the research procedure and the ethical constraints under which the THR sessions were being delivered, consent was solicited and obtained.

Terry was very shy during our first meeting and whenever I asked her a question she looked at her father for an answer. The father commented that at home she is not shy at all and she yells, cries and screams to get her point across. The father

mentioned a few times that Terry *"hears what we say to her, but she does not listen to what we tell her"* (Appendix H.4, Research Diary, May 13th, 2012, p. 317).

Planning Terry's First Set of Sessions:

Following Intake and based on the therapeutic goals that were prioritised by both father and child (Table 22, p. 168), and later confirmed by data collected from Terry's teacher (Table 18, p. 164 and Appendix Q, p. 340), I proposed that we start therapy with "a unit of work" on the difficulties that received the score of 10 on a Likert Scale from 1 to 10, with 10 being "having the most difficulty" (Table 22).

The THR objectives chosen were difficulty in concentration, difficulty with following verbal instructions, difficulty in completing homework and other chores, difficulty in keeping in focus, very sensitive and gets hurt easily. Other therapeutic objectives in the order of their perceived importance based on the data collected with the ADHD questionnaire, were:

The score of 9 was given to difficulties in **impulsive and does not think about the consequences of her actions, gets bored easily** and **difficulty in organising her work or her room.**
The score of 8 was given to **easily distracted, missing listening skills,** and **gets frustrated easily.**
The score of 7 was given to '**tends to get distracted and stops what she is doing',** has a low and negative **self-image, and** has **difficulties in making and keeping friends.**
The score of 6 was given to **having extreme mood swings,** from feeling good to feeling bad and vice versa.

Table 18
The Comparative Mapping of Terry's Therapeutic Objectives From the Teacher's and Father's Perspectives

ADHD Symptoms	**Teacher**	**Mother and Father**
Organisation	4	1*
Concentration	4	2
Focused (not distracted)	3	2
Relaxed (does not fidget)	3	2
Calm (no anger outbursts)	4	3
Self-confidence	4	3
Self-image	4	4
Sum	26	17
Average score	3.7	2.4

Table 18 is showing the comparative mapping of Terry's therapeutic objectives from the teacher's and the parents' perspective. On organisation the parents gave the score of 1, while the teacher gave the score of 4. I verified the difference with the parents and was told that Terry is not organised at home. She does not keep her room neat. They also stated that Terry is sharing a room with her older sister and they both do not keep the room neat and that they blame each other for the mess in the room. The teacher reported that Terry was well organised in class.

Table 19

Summary of Terry's first 10 sessions Progress by Her Therapeutic Objectives:

#	Weeks/ Therapeutic Objectives	1	2	3	4	5	6	7	8	9	10
1	Organization	1	3	3	3	4	5	5	4	5	5
2	Concentration	2	3	3	3	3	4	4	3	5	4
3	Focused (not distracted)	2	4	4	3	3	3	3	3	3	3
4	Relaxed (does not fidget)	2	4	4	4	5	4	4	3	4	4
5	Calm (no anger outbursts)	3	3	3	3	5	3	3	3	5	3
6	Self-confidence	3	3	3	4	4	4	5	4	5	5
7	Self-image	4	4	4	4	4	4	5	4	4	4
	Sum	17	24	24	24	28	27	29	24	31	28
	Average Score	2.4	3.4	3.4	3.4	4	3.9	4.1	3.4	4.4	4

Table 19 is showing Terry's progress during the first ten sessions of THR. Terry scored an average of 4 on her therapeutic objectives after ten THR sessions. The starting average was 2.7.

Table 20:
Summary of Terry's Progress on Attaining Therapeutic Objectives:
(During the period between the 11th session and the 20th session)

#	Weeks/ Therapeutic Objectives	11	12	13	14	15	16	17	18	19	20
1	Organization	5	5	5	5	5	5	5	5	5	5
2	Concentration	4	4	5	5	4	5	5	5	5	5
3	Focused (not distracted)	4	5	5	4	4	5	5	5	5	5
4	Relaxed (does not fidget)	4	4	4	4	4	4	4	4	4	4
5	Calm (no anger outbursts)	3	3	3	3	4	4	4	4	5	5
6	Self-confidence	5	5	5	5	5	5	5	5	5	5
7	Self-image	4	5	5	5	5	5	5	5	5	5
	Sum	29	31	32	31	31	33	33	33	34	34
	Average Score	4.1	4.4	4.6	4.4	4.4	4.7	4.7	4.7	4.9	4.9

Table 20 is showing Terry's progress on attaining her therapeutic objectives from the parents' perspective during the period beginning with the 11th session and ending with the 20th session. The average score of 4 that Terry had at the end of her 10th session went up to an average score of 4.9 at the end of the 20th session. As it can be seen from the table, Terry's behaviour continued to improve as she moved toward attaining her therapeutic objectives.

Table 21

Summary of Terry's Progress Attaining Therapeutic Objectives:

(During session 21 till session 30th)

#	Weeks/ Therapeutic Objectives	21	22	23	24	35	26	27	28	29	30
1	Organization	5	5	5	5	5	4	5	5	5	5
2	Concentration	5	5	5	4	4	4	5	5	5	5
3	Focused (not distracted)	5	5	4	4	4	4	4	4	5	5
4	Relaxed (does not fidget)	4	4	4	4	4	4	3	4	4	5
5	Calm (no anger outbursts)	5	5	5	4	5	5	5	5	5	5
6	Self-confidence	5	5	5	5	5	5	5	5	5	5
7	Self-image	5	5	5	5	5	5	5	5	5	5
	Sum	34	34	33	31	32	31	32	33	34	35
	Average Score	4.9	4.9	4.7	4.4	4.6	4.4	4.6	4.7	4.9	5

Table 21 is showing Terry's progress during the period starting with session 21 and ending with session 30. Terry's average score increased from 4.9 to 5. While her evaluations fluctuated during this set of ten sessions, the general trend shows continuing progress and an ability to sustain her gains.

Table 22: Terry's ADHD inventory: before therapy started and after 30 sessions

ADHD Symptoms	Scores before treatment	Scores after 30 sessions
1. Capable of concentrating for	15 minutes	20 minutes
2. Easily distracted	10	
3. Difficulties listening to verbal instructions	10	
4. Difficulties in learning new games and new skills	1	
5. Does not know how to listen	8	
6. Difficulties in sitting quietly in one place for more than	15 minutes	20 minutes
7. Difficulties in communication skills	5	1
8. Impulsive	9	1
9. Gets bored easily	9	5
10. Difficulties in following verbal instruction	10	1
11. Difficulties in organising work or the room	9	1
12. Delays doing things need to be done	1	1
13. Difficulties in starting things	8	2
14. Starts doing things but does not finish	6	1
15. Does not finish homework	10	1
16. Inconsistent appearance	1	1
17. Tends to be diverted	10	1
18. Difficulties in self image	1	1
19. Difficulties in keeping friends	1	1
20. Avoiding group activities or sporting events	1	2
21. Gets angry easily	8	2
22. Has difficulties falling asleep	1	1
23. Has difficulties waking up	1	1
24. Often tired	1	1
25. Mood swings	7	2
26. Difficulties in planning activities	8	4
27. Gets hurt easily	10	2
28. Gets frustrated easily	9	2
29. Often has behavioural problems in school	1	1

Table 22 is showing Terry's ADHD inventory, before therapy started and after 30 sessions. The table shows that Terry improved in all her difficulties.

Table 23: Terry's self esteem score before (B) THR sessions and after (A) 30 session:

	This child	I am definitely like him/him	I am like him/her	I am a bit like him/her	I am not so much like him	I am definitely not like him/her
1	Is nice	A	B			
2	Participates a lot in school	A		B		
3	Wants to be appreciated as a good student	A	B			
4	Knows a lot on different subjects	A	B			
5	Loved by his/her classmates	A and B	B			
6	It is important for him to receive good grades	B and A				
7	Is talented in studding	A	B			
8	Has good ideas	A		B		
9	Makes sure that he/she is not late for class	A	B			
10	You can learn a lot from him/her	B and A				
11	When he speaks, other children listen to him/her	B and A				
12	His/her classmates like to play with him/her	B and A				
13	Is a good student	A		B		
14	Is shy to ask when he/she does not understand	B and A				
15	It is very pleasant to be with this child	B and A				
16	Knows how to prepare a topic and to tell about it in class		B and A			
17	Knows how to express himself		A	B		
18	Has many friends	B and A				
19	Has a great influence on his/her classmates	B and A				
20	His/her ideas are accepted by his/her friends	A	B			
21	Is a good student	A		B		
22	It is beneficial to study with him for exams	A		B		
23	His/her classmates do what he/she tells them	B and A				
24	Is very smart	A	B			
25	Makes friends easily	A	B			

Table 23 is showing Terry's evaluation of her own self-esteem before therapy and after 30 sessions. The table is showing that Terry is evaluating herself higher at the end of 30 sessions than she did during her Intake.

The themes that emerged from The Parents' Weekly Reports and the children's Weekly Successes Report and the Teacher's Report were: 'facilitating new skills', 'facilitating transfer of the new skills' and 'amplification of new skills'

Table 24

Frequency of Improvement Reports

	Organization	Concentration	Focus	Relaxed	Calm
Hillary's reports	25 times	20 times	20 times	14 times	29 times
Saul's reports	15 times	25 times	26 times	29 times	29 times
Terry's reports	43 times	25 times	17 times	11 times	10 times

Table No. 24 shows the frequency with which parents, teachers, child and the THRP (see Research Diary) reported an improvement in one of the five therapeutic objectives. For instance in Hillary's reports, improvement in organisational skills was reported 25 times and improvement in concentration skills was reported 20 times. Improvement in focus skills was reported 20 times, improvement in relaxation skills was reported 14 times and improvement in being calm and having no anger outbursts was reported 29 times. This phenomenon repeated itself in Saul's reports and in Terry's reports. In all three cases there is evidence of progress. Data was collected from parents, teachers, children and from my diary. The fact that the improvements in these therapeutic objectives were mentioned repeatedly shows the importance that the participants in this research assigned to these therapeutic objectives. Internal validity was found to be high. Within each case I cross - referenced the data collected from parents, teachers, clients and my diary and found that internal validity was very high. Additional evidence of high internal validity was found by cross checking between cases (Appendix I, pp. 321-329).

4.5 Stage 6: Expert Validation of the Manual

During Stage 6 experts were chosen to review the findings and conclusions obtained during Stage 5. Three expert THRPs were chosen. All three experts were experienced women managers of established practices. One of the experts, 'L', manages a large programme in Belgium. The second expert, 'A', has experience with THR programmes overseas (USA, United Kingdom, New Zealand, Hong Kong, Taiwan, Japan, Spain and Russia) where she regularly conducts on the job training master clinics and manages a large programme in Israel. The third expert, 'Lo', has managed both THR programmes and training programmes for THRPs in Israel and has recently joined a panel of THR experts working with the Israeli Ministry of Sport and Culture on shaping THR national policy.
All the communications with the chosen experts were in English.

The following findings and conclusions were presented to the chosen Equine Assisted Therapy experts for validation:

1. Therapeutic Horseback Riding (THR) is a form of Equine Assisted Therapy. Its most important feature is that it is therapy and not a recreational activity. THRP, parents, child and teachers should be fully aware of that fact.

2. A therapeutic alliance between THRP, parents, child and teachers is most important for the success of the therapy.

3. The main engine of the therapeutic process is the formulation of a common therapeutic vision and therapeutic objectives.

4. Part of the therapeutic process requires following-up the client's moving towards and achieving his therapeutic objectives.

5. The effectiveness of THR is enhanced by the use of reinforcement and exclusion of aversive control.

6. By facilitating reflection on the child's successes, THRP demonstrate the relevancy of skills learned during the therapy sessions.

7. Learning from successes contributes to the growth and development of the child.

8. The transfer of skills learned during THR sessions to the school and the home are indices of THR effectiveness.

9. The amplification of successes is a learning motivator.

Experts were asked to indicate the degree of agreement they feel best describes their experience in the field, using a scale of 1 to 5 and to provide narrative examples from their own practice to support their evaluation of the study's findings and conclusions.

1 - 'I don't agree with the statement',

2 - 'I slightly agree',

3 - 'in some instances I agree and in some I don't',

4 - 'I mostly agree',

5 - 'I fully agree'.

Table 25: Experts Evaluation of Findings and Conclusion

Question #	Expert L. (From Belgium)	Expert A. (From Israel)	Expert Lo. (From Israel)	Average score
1	5	5	4	4.7
2	5	5	5	5
3	5	3	5	4.3
4	5	5	5	5
5	5	5	4	4.7
6	5	5	3	4.3
7	4	5	4	4.3
8	5	5	5	5
9	5	5	3	4.3
Average Score				4.62

Table 25 shows that all three experts supported the findings and conclusions of the study at an average level of support averaging 4.62 ('I fully agree') and based that agreement on their experience with equine assisted therapy.

The narrative answers that the three experts gave further support the study's findings by bringing examples illustrating the degree of support they gave the findings and conclusions of the study.

For example the KTR model's therapeutic ideology was validated by all. 'L' wrote the following:

> *It is important that the client is fully aware of the fact that it is about a therapeutic intervention as a purpose to help the client in his process. During intake, I always make a clear statement about that so I am sure the client understands he does not come to "play" with the horses, …The therapeutic intervention with the horses supports the client in his development, the intervention is one element to reach the goal the client and therapist have determined together* (Appendix R, Q1. p. 345).

'A' who trained both handicapped Olympic riders and riders with special needs feels that Equine Assisted Therapy can be both a recreational activity and/or a therapeutic treatment:

> *Equine Assisted Therapy can be considered both recreational and therapeutic as it treats the mind, body and soul (definition of recreation- Oxford dictionary, mental and spiritual consolation)... For example: My daughter had some serious problems of control with anxieties- at the age of 8 she was wetting her bed each night. After participating in the therapeutic riding program she no longer wets her bed* (Appendix R, Q1, p. 347).

'A's opinion is reinforced by 'Lo' who felt that:

> *…. THR is aimed at improving the quality of life of special riders. The recreational activity part works as a strategy to fulfill aims and goals* (Appendix R, Q1, p. 350).

With regard to the KTR model's imperative that THRPs work at creating a strategic therapeutic alliance between THRP, child, parents and teachers 'Lo' stated unequivocally *"No doubt about it"* (Appendix R, Q2, p. 350) while 'A' explained that THR:

> *...can only be successful in all environments if it includes all the above persons. 40% of the cure comes from the person, family backing, and motivation* (Appendix R, Q2, p. 348).

'L' fully supported this finding with evidence from therapy conducted with children from a children's shelter:

> *... it is indeed important that there is alliance and understanding between the various persons connected to the client. ...I work a lot with teenagers who stay temporarily in a shelter. Communication between the various parties involved is important to work together, so that the energy of each therapeutic intervention can improve success* (Appendix R, Q2, p. 345).

With regard to the need to formulate a 'common vision' and 'therapeutic objectives' 'L' felt that in her experience:

> *Definitely! With every client, I discuss the possibilities, priorities to choose and in the end, we set a goal the client want to reach. Every session we work on it and sometimes discuss if we have to adjust the goal or maintain* (Appendix R, Q3, p. 345).

'A' agreed with this feature of the KTR model *"There must be a common vision and objectives"* (Appendix R, Q3, p. 348) but mentioned the important role-played by the horse and the skill needed to leverage the properties of the horse in order to facilitate the therapeutic process. 'Lo' fully agreed with the importance of formulating a common therapeutic vision and the derivative therapeutic objectives by choosing the statement *'I fully agree'* (Appendix R. Q3, p. 350).

'Lo' also indicated that she -*'I fully agree'* (Appendix, R. Q4, p. 350) with the finding that follow up is necessary both for achieving therapeutic objectives and for the gains made by the client toward achieving his therapeutic objectives. 'A' felt that *"Without follow up the therapy is left open ended"* (Appendix R, Q4, p. 348) and 'L' pointed out the benefits of following up on gains:

> *Indeed! In the beginning of a session, I question the client about things that happened in between 2 sessions so the client is getting insight whether he is able to integrate the skills in everyday life* (Appendix R, Q4, p. 346).

The KTR model's total reliance on reinforcement for the shaping of skills and for supporting learning processes and it's recommendation that aversive control be excluded from the repertoire of THRPs, parents and teachers finds unequivocal support in 'L's' practice:

> *Positive comment, naming and repeating qualities and strengths of the client is important to improve the self. I never use aversive control. I notice that in talking to the client in a positive way, it helps them to believe in themselves. Non-verbally signs tell me that the client integrates the positive comment* (Appendix R, Q5, p.346).

'A' brings her own experiences as a practitioner to bear on the subject:

> *Only positive reinforcement works. Example: A child was in a riding therapy session when her instructor shouted to her that her horse was stupid - she took this personally, left the session crying and never came back to EAA/T again* (Appendix R, Q5, p. 348).

'Lo' took a somewhat guarded position on the subject and felt that she *'I mostly agree'* (Appendix R. Q5, p. 350) with the need to use only reinforcements when teaching and shaping skills. The KTR model encourages THRPs to facilitate reflection on the child's successes as a means to demonstrate to the child the relevancy of the skills learned during THR in other learning environments such as the home and school. When the child considers the skills learned during THR to be relevant to his ability to meet the challenges facing him in school and at home he is more likely to learn them and use them when challenged. 'L' fully supports this position and comments as follows:

> *During sessions, I always emphasise the success and relate this success to every day life so the client can understand it is about using the same skill in another situation. Even small children can understand that easily when explained in a language adapted to their age* (Appendix R, Q6, p. 346).

'A' strongly supported this point of view and emphasised that she *'I strongly agree'* while choosing to enlarge on the importance of the practice of reflection to the therapy's effectiveness and progress and to the development of the THRP himself:

> *This is extremely important. Reflection requires the practitioner to write down what happened, what was observed, where were the high points and what did the person respond to. Any therapeutic process requires a practitioner to be able to review their therapeutic sessions its achievements or non-achievements in order to build future goals.*

> *Reflection allows a practitioner to continue from week to week* (Appendix R, Q6, p. 348).

On this point 'Lo' felt that her experience as a THRP can only partially support this finding and chose to comment that *'in some instances I agree and in some I don't'* (Appendix R, Q6, p.350).

One of the main features of the KTR model is its reliance on the principle that the most significant learning occurs when learning from successes. This principle was supported by the study's findings. To validate this point the THR experts were asked to evaluate the contribution of 'learning from successes' to the growth and development of the child in THR. 'Lo' supported this finding and enlarged on it providing an argument for the need to prepare the child for situations were successes are not abundant:

> *Yes but at a certain point some need to face challenges with no immediate success in order to learn assiduity, tenacity, capacity to solve problems and learn to deal with learning process* (Appendix R, Q7, p. 351).

'A' endorsed this feature of the KTR model. She felt that it was:

> *Extremely important motivation- raised self-esteem, self-control, empowerment, organizational skills and more…* (Appendix R, Q7, p. 349).

'L' further supported this position but not without stressing that at times clients need to be allowed to become frustrated, discover the feeling and cope with it. Staying with the feeling allows the child to learn how to cope with it and become successful. 'L' brought the following evidence to bear:

> *Success is important, indeed. Sometimes it is good to let grow frustration. In these situations, the therapist has to be very alert so that the frustration and negative experience can be transformed into a positive experience. Example: A teenager (13 year) had difficulties to express her feelings. During the therapeutic session with the horses, she was not successful during the exercise. I chose not to support her verbally, but let her go into frustration. She started to cry. We discussed what happened, and she was prepared to share a secret with one of the horses. She and the horse shared an intimate moment. After that, she started herself exercising again. I didn't ask nothing. In the end of that session, she was successful. She learned a lot from the fact she was not successful in the first place* (Appendix R, Q7, p. 346).

According to the KTR model the transfer of skills learned during THR sessions to the school and the home learning environments needs to be facilitated by the THRP and is an indication of THR effectiveness. Based on her experience with THR 'L' formulated the following answer:

> *I have the impression that children learn a lot from working with horses. It is easier for them to learn new skills in interaction with the horses, and then transfer it to everyday life. ...A mother told me that her son was getting more confident after the sessions with horses. He was more assertive at school and emotionally; he was feeling better as well at home as in school* (Appendix R, Q8, p.346).

'A' strongly supports the position that skills learned during THR are relevant to the world outside the riding arena and are transferable:

> *When a child learns under the guidance of a THR practitioner to negotiate with a horse in order to achieve a riding goal, they have been taught a transferable skill that can be used back at home or in any other environment.* (Appendix R, Q8, p. 349).

'Lo' fully supported the findings by indicating that *'I fully agree'* (Appendix R, Q8, p. 351).

One of the key therapy skills that a THRP needs to learn is how to amplify successes so that the learning process will be most effective and the growth and development processes can be 'boosted' during the THR sessions. Based on her experience 'Lo' felt that amplification was an important skill that can be used most of the time as long as the THRP does not forget that:

> *most of the time. Still some kids need to feel objectivity in order to trust the instructor. Amplifications of success may work in both ways* (Appendix R, Q9, p. 351).

'A' took a broader view of this skill. From her experience groups have the ability to amplify successes. When a child:

> *...is given the opportunity to recognise that their effort had a positive effect not only on his or her riding ability, but also on the group and the practitioner he or she become empowered, motivated and have a desire to return the following week to continue their sweet success* (Appendix R, Q9, p. 349).

'L' supported the need for the amplification of successes and highlighted the contribution 'feeling successful' makes to the client's self esteem:

> *Indeed! It is very important to emphasise every success the client makes. I also often repeat the successes the client has made so the client can integrate the wonderful feeling the success creates. It increases the feeling of self-esteem* (Appendix R, Q9, p. 347).

Summary

This chapter examined the research data using content analysis to identify common themes and categories. First the pilot data collected by interviews and observations, was examined showing that most parents reported no change in their child's behaviour at home and in school as a result of therapeutic horse-back riding sessions. In addition, THRPs did not pay attention to the need to transfer skills learned during the THR sessions to other environments. The results of the pilot research informed the design of the THR Manual and of the Knowing Therapeutic Riding model (KTR model), which was applied in three cases. An emphasis was put on transferring skills learned during THR sessions to the school and home. Celebrating success and the amplification of successes were also important features of the THR programme. The results of the study showed that skills and strategies learned during THR were successfully transferred in all cases and that the children challenged by ADHD that engaged with the THR programme that followed the KTR model achieved their therapeutic objectives.

The next chapter answers the research questions. Five research questions were asked. The first two questions focused on the first stage of the research, the pilot study. The last three questions relate to the multiple case study research conducted in Stage 4 and the application of the KTR model, the Knowing Therapeutic Riding model.

Chapter 5
Discussion

5.0 Introduction - The Critical Discussion of Findings

This chapter presents a critical discussion of the findings focused on answers to the research questions and the evaluation of the external validity of these findings. Five research questions were asked: How do parents of children challenged by ADHD perceive the horseback riding therapy practice? How do Therapeutic Horseback Riding Practitioners (THRPs) perceive the horseback riding therapy? How can the THRPs facilitate the learning of new skills that the client needs, in order to cope more effectively with his/her therapeutic objectives? How can the THRP facilitate the transfer of learning gains during the student's participation in the THR programme to other learning environments? And what can THRPs do to amplify learning?

Each of the above research questions received an answer, based on the data collected. The data was reduced into categories and subcategories that I found regarding the question (Shkedi, 2007; McLeod, 2011). During the critical discussion of the findings I compared my findings to the finding of other researchers while emphasising the differences between my research, and the research of these researchers and theoreticians, differences in culture, differences in the research tools used and differences in the age of participants. In addition I conducted an evaluation of the external validity of the findings (Sabar Ben-Yehushua, 2001), as outlined in the methodology chapter. Where the external validity of the findings warranted it, conclusions and recommendations were formulated. At the end of the chapter I have made a series of methodological recommendations and discussed the limitations of my study.

This study evaluated the outcome and the effectiveness of a new therapeutic approach for children aged 9 – 12 diagnosed with Attention Deficit Hyperactive Disorder (ADHD), the Knowing Therapeutic Riding (KTR) model. The new therapeutic approach was developed on the basis of the results of a pilot study conducted by me on four different therapeutic horseback riding schools and on the basis of my own experience and practice as a therapist and THR practitioner, which I integrated reflectively. The KTR model was published in the form of a manual for THR practitioners. It is a model for Therapeutic Horseback Riding (THR). During the research the KTR model was applied in one THR programme, in three cases.

The cases were labeled Hillary, Saul and Terry for convenience and were evaluated to determine the effectiveness of the KTR therapy model. The names assigned to the cases were fictitious to protect the participant's privacy.

The overall research design was a six-stage action research with a multiple case study design imbedded in stage 4. Data was collected during the Intake Session, which was the first meeting between the parent(s), the child and myself. In addition data was collected from the Parents' Weekly Report, the Child's Success Lists, the Teacher's Periodic Reports and the Researcher Diary. Data was also collected from documents produced by the children's schools and by their parents. Data analysis was conducted using the content analysis method, which uses categorisation as a means to reduce the data into clusters of meaning (Shkedi, 2004).

The Themes that emerged from the Parents' Weekly Reports, the Children's Weekly Successes Report and the Teacher's Report were: 'the support of new skills', 'facilitating the transfer of the new skills', 'amplification and celebration of successes'.

Figure 5

The KTR (Knowing Therapeutic Riding) Model

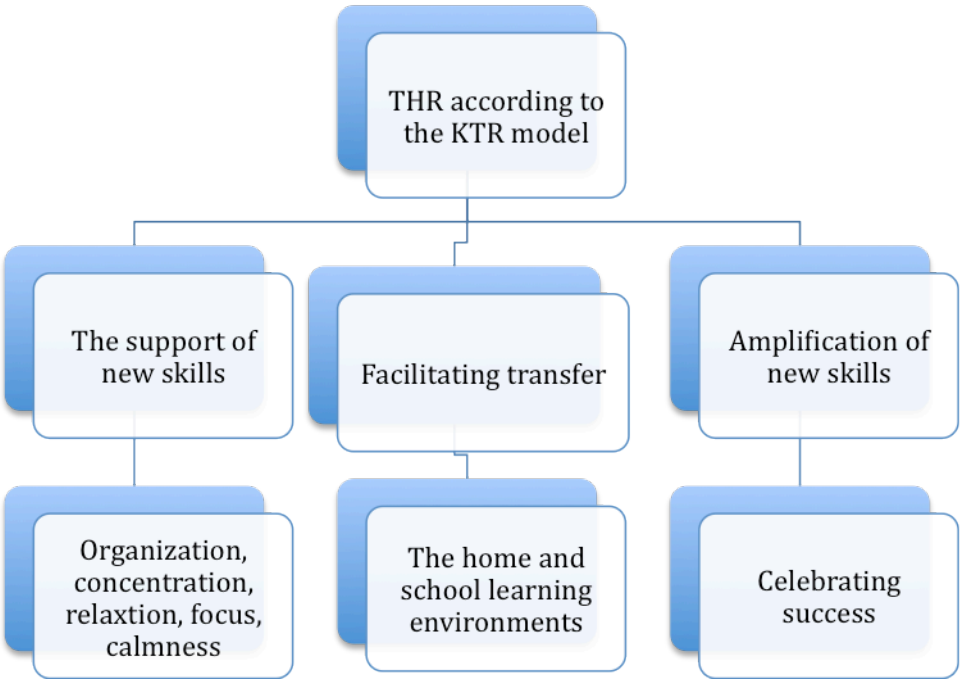


Figure 5 provides a graphic representation of THR conducted according to the KTR model. The KTR model stressed the facilitation of new skills, the facilitation of the transfer of skills learned in the arena to other learning environments, such as the school and the home and the amplification of the valence of newly learned skills.

The next section will discuss the answers to the research questions that were asked. The answers to the first two questions in this section were based on the data collected during the pilot study.

Answers to the Pilot Research Questions

5.1 How do parents of children challenged by ADHD perceive the practice of horseback riding therapy and its effectiveness?

During the pilot study, which was the first stage of the research, interviews were conducted with parents of children challenged by ADHD and who had enrolled their children in therapeutic horseback riding programmes. The interviews were conducted on four different horse farms, which provided Therapeutic Horseback Riding (THR) programmes. The results of these interviews drew a picture that represented how these parents perceived the horseback riding therapy practice and its effectiveness. The parents' perception was divided into three subcategories: the child at the farm, the child at home and the child in school (Figure 3).

Ten parents were interviewed (Appendix A, pp. 271-273). All the interviewed parents reported that their children liked to come to the farm and loved to ride. The data showed that the children came to the farm to learn how to ride and did not regard the riding session as therapy. The parents were not involved in the process of therapy and the children did not participate in the Intake session (the first meeting between the parents and the THRP).

Parents were asked to tell the story of their experience with their children on the farm, at home and in school. Their perception of their children was highly compartmentalised by the context in which the child operated and how they experienced them within that context. The parents perceived their children's

behaviour on the farm differently than the children's behaviour at home or in school. On the farm all the parents saw the child as being organised, they perceived him/her as being calm, in focus and in control, able to concentrate and keep his/her concentration for extended periods of time (about 30 minutes) during the complex tasks he/she is asked to perform while riding the horse. According to the parent the child listened to the THRP's instructions and did what he/she was told to do. The child felt good about himself/herself and was proud of his/her ability to control the horse (Appendix A, pp. 271-273).

The parents perceived their child at home and in school as a different child, from the one they saw on the farm. At home and in school the child is 'the one who has ADHD', who is disorganised, not in focus, easily distracted, having difficulties in concentrating, cannot sit for more than five or ten minutes quietly in the same place. The child did not listen to and did not follow instructions when the parents asked him to perform a task. The child tended to fight with his or her siblings. Anger outbursts were very common in the life of these children. These children had very few friends if any. Researchers like Yishai-Karin (2002), Barkely (2009b), Greenspan and Greenspan (2009) supported these findings and added that the child diagnosed with ADHD, does not have any friends and will experience great difficulties in making friends and in keeping them.

Parents reported that their children had disciplinary problems and difficulty accepting authority figures (Appendix A). The child tended to fight with members of his peer group in school. In addition parents reported that their children are often asked to leave the classroom as punishment for their unruly behaviour.

The parents I interviewed in this pilot research, related to the activities at the farm, as recreation activities. Their children came to learn how to ride and to have a good time.

Only one parent out of the ten interviewed reported noticing some behavioural changes at home and in school following Therapeutic Horseback Riding (THR) sessions (Ronen's father's interview, Appendix A, p. 273). The rest of the parents, nine parents out of ten, reported that they did not see any changes at home and in school in their children's behaviour following the therapeutic horseback riding

sessions. This finding contrasted with the findings that during THR sessions, in the riding arena, the child behaved differently.

Transfer of skills learned on the horse farm during THR sessions did not occur. Transfer of the new skills was not facilitated by the THRPs. In order for transfer to take place, from the riding arena to different environments outside the riding therapy arena, like the home or the school, it is necessary to activate the newly learned knowledge in the new environment (Perkins and Salomon, 1988, 1992; Gelman and Lucariello, 2002; Bransford et al., 2000; Singley and Anderson, 1989). In their interviews parents provided no evidence that the new knowledge was activated at home or in school. Transfer did not happen spontaneously. This conclusion was supported by the findings of Perkins and Salomon who stated that *"Transfer does not take care of itself,"* (Perkins and Salomon, 1988, p.23) (see Literature Review, p. 61).

Research conducted by Basile (1997) and by Hosser (2012) on therapeutic horseback riding and children with ADHD, showed no significant changes in the pretest/posttest scores. These findings indicated that there was no transfer of skills from the riding arena to the outside world. The findings of the above mentioned two research papers were supported by the findings of my pilot study, indicating that the external validity of the findings was high.

The learning environment in the arena on the farms where I conducted my observations and interviewed the therapeutic horseback riding practitioners were characterised by a combination of pleasant moments and attempts at aversive control. The observations that I conducted during THR sessions showed that the THRPs were at times screaming at the children in therapy and they were critical of the child, telling him that he was not paying attention or was not listening (Appendix C, pp. 274-276). The ability of the practitioner to be a reinforcing agent was likely to be diminished by this use of aversive control technique (Bandura, 2011; Skinner, 2011).

5.2 How do Therapeutic Horseback Riding Practitioners (THRPs) perceive horseback riding therapy?

The findings in this category (Figure 2, p. 127) were divided into three subcategories: 'therapeutic skills and objectives', 'therapeutic process' principles' and 'the participants in the process of THR'.

The findings show that Therapeutic Horseback Riding Practitioners (THRPs) did not demonstrate an understanding of therapeutic objectives. THRPs did talk about therapeutic objectives, but in fact all therapeutic horseback riding practitioners that I interviewed identified therapeutic objectives as stages in the acquisition of riding skills. The THRPs worked on teaching riding, believing that through the child's riding on the horse and having a good time, the child will 'automatically' become empowered and will gain self-confidence, as stated very clearly in Sam's interview: *"The goal of therapeutic horseback riding is to empower the child. This is the essence"* (Appendix D, Q1, p. 277). When asked how the empowerment process was achieved, the answer was *"by teaching the rider riding skills"* (Appendix D, Q1, p. 277). Empowerment, developing self-confidence and having a good time were the major objectives of THR according to the THRPs interviewed. Practitioners were not aware of the importance of the transfer of skills clients acquired during THR sessions to other environments, like the home and the school. Practitioners did not mention transfer during the interviews they participated in, and did not work with the parents or with the teachers in order to help them facilitate the transfer of skills learned by the children in the arena to their homes and to the schools. Basile (1997) viewed the lack of personal contact with the children's parents and teachers in her research as having a negative impact on the quality of her research and she recommended that THRPs have direct communication with the teachers and parents of their clients. According to Basile (1997) the therapeutic horseback riding practitioners should explain the objectives of the therapeutic riding and create a collaborative relationship with both parents and teachers. The findings of my pilot study support Basile's findings and recommendations and have external validity.

Parents that I interviewed reported that their children learn how to ride and were happy to come to the sessions. However most parents (nine out of ten) interviewed

also reported that no change for the better occurred with their children's behaviour at home and in school. Apparently, it became clear that most parents and children who engaged with the THR programme seeking symptomatic improvement discovered that gains made during THR did not translate into gains on ADHD therapeutic objectives, nor were they sustainable outside the riding arena, at home or in school. These findings stand in sharp contrast with the work of Cuyper, De Ridder and Standheim (2011) who found in their research that therapeutic horseback riding had a positive effect on 5 children with ADHD in several domains, the domain of the social role behaviour, the quality of life of the children diagnosed with ADHD and the motor performance of these children.

Therapeutic horseback riding practitioners that I interviewed pointed out that the relationship between the child, the practitioner and the horse is a very important principle of the therapeutic riding. *"A good interaction between the three is the basis for every therapy,"* stated one of the THRPs named Amos (Appendix D, Q2, p. 281). Practitioners talked about positive interaction, positive environment, positive feedback and respect, but in fact data from the observations conducted during therapeutic horseback riding sessions showed that THR practitioners shouted at the children, criticised them and blamed them for not listening to what they tell them to do. The therapist-client relationship is one of the corner stones of an effective therapy according to the Humanistic Psychology stream (Rogers, 1980; Yalom, 2002; Green, 2003). When the therapist accepts the client as he/she is, with his/her feelings and thoughts, with empathy and without judgment, change can take place (Rogers, 1957; Haugh and Merry, 2006; Lambert, 1992). These conditions were not present on the farms where interviews and observations were conducted and according to the interviewed parents, no change did in fact occur. The triangulation of my findings with those of other researchers showed that these findings had external validity and therefore conclusions could be drawn and practice recommendations could be made.

The fact that the pilot findings of this research showed no changes in the children's symptomatic behaviour following therapeutic horseback riding led me to believe that **a link was missing** between the THR experience and the world beyond the riding arena, a link that would facilitate the transfer and application of the learned skills and strategies acquired by the ADHD client during his therapeutic experience

to the solution of challenges experienced in the home and in the school learning environments. These findings led me to the building of the Knowing Therapeutic Riding model (the KTR model), which was the basis for the THR manual and for the therapy I conducted in my practice.

5.3 Critical Analysis of Findings Using KTR Principles and Assumptions

The findings of the pilot study and the critical review of the professional and academic literature led me to the following conclusion that became the corner stones of the KTR model. The KTR model of therapeutic horseback riding is firmly rooted in the Humanistic Psychology Therapeutic stream (Maslow, 1967, 1998, Rogers, 1951, 1980, Rotter, 1993). The model borrows from the behaviouristic-cognitive techniques of behaviour modification (Wolpe, 1969; Bandura, 1988) and from the systems therapy model of family therapy (Satir et al., 1991; Prochanska and Norcross, 2007) a set of theoretical principles.

The first principle employed is that **the client must play a central role** in the therapeutic process. The client must be informed that he is participating in therapy designed to facilitate the actualisation of his strength and skills in the pursuit of his therapeutic vision and therapeutic objectives. Achieving the client's therapeutic vision must be a collaborative effort of the client, the therapeutic horseback riding professional and the relevant stakeholders such as parents and teachers. This strategy focuses the child's awareness on the fact that he is in a therapeutic setting and not coming to the farm just to learn how to ride and to have a good time. THR is a therapeutic intervention. Rothe et al. (2005) also say this very clearly:

> *It should be clear to the child that the work is therapy and not horsemanship training* (Rothe et al. 2005, p. 376)

Also Lentini and Knox (2009) state that:

> *The therapist and the client should have a clear understanding of the therapeutic goals so the client does not confuse it with social outing* (Lentini and Knox, 2009, p. 51)

Learning how to ride can be a source of success, and having a good time during the THR sessions facilitates learning of new skills and strategies (Rogers, 1951; Cepeda and Davenport, 2006; Cooper, Watson and Hoeldamft, 2010).

During the Intake of Hillary, Saul and Terry, the participant clients in this study, they were informed that they are going to be engaged in therapy. They were informed that the therapeutic programme included thirty sessions or more, and that every session will start with their presentation of a list of successes that they accumulated during the previous week.

In Hillary's case:

> *It was very important for me to make sure that Hillary and her mother understood that the meetings with me are for therapy and that the main goal of the therapy is that Hillary will be able to transfer the skills that she learns during our sessions to other environments, the home and the school. I said to Hillary that what we learn during the Therapeutic Horseback Riding sessions could assist her outside the therapy, in school and at home. Hillary was excited and said: "I need to work on my anger outburst!"* (Appendix F.4, Research Diary, Nov. 16th, 2011, pp. 298-299).

According to Hillary the most important symptoms that she wanted to work on were her difficulty in controlling her anger outbursts and her inability to listen to verbal instructions. During the building of the common therapeutic vision and objectives, Hillary's mother contributed what, from her perspective, was a most pressing problem. Hillary's mother felt that Hillary needed to be more organised in her room and in her preparations for school (homework, school bag). Hillary on the other hand emphasised the control of anger outbursts and listening to verbal instructions as the main issues to be worked on. These issues wore validated by the ADHD inventory questionnaire and the Parents Weekly Report. Both issues were included in the common therapeutic vision and objectives.

In Saul's case, Saul mentioned that his main issue was that: *"people don't listen to me"* (Research Diary, Appendix G.4, Jan. 15th, 2012, p. 310). The parents on the other hand emphasised that:

> *Saul gets angry and teds to throw tantrums over little things that upset him. He gets emotional and they cannot seem to control him when he is in that state. The parents reported to me that they feel very frustrated. They are being called to school twice or sometimes four times a week and they do not know what to do about it…Saul acknowledged his difficulties in controlling his anger outbursts an*

> *issue that was also validated by the ADHD inventory questionnaire* (Appendix G.4, Research Diary, Jan 15th, 2012, p. 310).

Both issues were incorporated in Saul's therapeutic programme, thus giving Saul a central voice in the therapy.

In Terry's case, Terry did not speak with me during the Intake procedure, deferring to her father who was present. It was clear to me that in order to hear her 'voice' I needed to facilitate her self-expression during her riding. During the first Therapeutic Horseback Riding session, I was able to facilitate Terry's self-expression and as a consequence Terry indicated that her main goal was to work on her fears. Terry's THR session was immediately adapted to the therapeutic objective she had identified as being most important to her 'being free of her fears'. During the THR session we worked on the fear that the new riding experience generated, which went down from the level of 10 to 0.

> *I have asked Terry to tell me what she gained from this session and she reported: I learned to calm myself and not to give up and that fear is something that I do to myself and I can also overcome it just like I did. I asked: How would you do it at home? Terry said that she would remember this lesson and overcome her fears everywhere else. She said that she is afraid to be alone and afraid to sleep at her friends' homes. I told her that I was proud of her and how well she succeeded to overcame her fear, I said: "you did it' great for you!" high five!* (Appendix H.4, Research Diary, May 20th, 2012, p. 318).

Hillary, Saul and Terry played a central role in the therapy.

A related principle is that the therapeutic horseback riding professional's work needs to be supported by a **strategic alliance forged between the therapeutic horseback riding professional, the child, the parents and the teachers**. The therapeutic alliance helps redesign learning environments in the home and in school, so that they more readily support the skills and strategies learned during THR (Yagil, 2008; Barkley, 1998). The most dramatic demonstration of this principle can be found when comparing the findings of the pilot to the findings of the main research. The pilot findings showed that all THRPs interviewed, felt that parents had no role to play in THR except in driving the child to the farm. 'The child

arrived with his father. The THRP asked the father to leave the place' (Appendix B, Observation #1, P. 273). In the main study the parents and the teachers had a major role in the therapy process. They received training on how to redesign the environment at home and in school and how to celebrate successes. Parents submitted a Weekly Parents Report and the teachers submitted Periodic Reports.

The third principle is that **the transfer of skills learned must be facilitated and cannot be expected to occur spontaneously**. In order for the transfer of skills learned during therapy to be effective it is necessary to **amplify** the valence of that skill and to prepare supportive learning environments at home and in school (Brookfield, 2007; Flint, 2002; Perkins and Salomon, 1988, 1992). Each skill in the repertoire of skills the THR client uses has a valence (value) determined by the usefulness of the skill in his forward movement to actualise his therapeutic vision. The higher the valence of the skill the more likely it is that the client will use it when he is experiencing an ADHD challenge. When the client is successful in his use of the new skill the relative value of that skill rises. When that success is **amplified and celebrated** the value rises more. When the success is celebrated at home and in school the value of that skill rises even more. In order for that success to be celebrated at home and in school the home and school environments must be adapted to the needs of the child diagnosed with ADHD so that they support the newly learned skills and strategies (Skinner, 2011).

The fourth principle calls for the **evaluation of the effectiveness of THR** in terms of the child's ability to transfer skills learned during THR sessions to the world at home and in school and in terms of the sustainability of the new skills learned. THR can be considered to be an effective therapy only if it can facilitate the transfer of skills learned and strengthened during THR into the worlds outside the riding arena, the home and the school (Green, 2003; Yalom, 2002). THR is considered to be effective when it can show that following the transfer of the skills learned and strengthened during THR into the school and the home, the transferred skills are sustainable over time.

The KTR Model has a set of basic assumptions. These assumptions are firmly rooted in my practices and in the research and the theory that informs my practice. My practice and my therapeutic approach derive from the humanistic stream

(Rogers, 1980; Maslow, 1967; Perls, 1978; Rotter, 1954). Therapeutic horseback riding according to the KTR Model is based on these assumptions:

1. Mind and body are part of the same human system. The system strives towards balance. The system is balanced in accordance with the quality of the interaction of the individual with the environment and in accordance with the dynamic properties of the individual (Rogers, 1951; Perls, 1978). Environments that have not been adapted to an individual's needs, handicap the balancing process and eventually lead to an ineffective balance that will hinder his functioning in the home and school settings. The movement of the individual with an ineffective balance toward the self-actualisation of his potential is slowed down and maybe halted.

2. Clients have a large inventory of skills. A few of these skills make up the core repertoire of skills the client possesses. Each skill has a valence. The higher the valence, the more dominant the skill is in the repertoire of problem solving skills and the more likely that it will be picked over other skills to meet a challenge (Rotter, 1954).

3. Clients have all the resources they need in order to make changes in the system's balance and fine tune it according to their needs (Perls, 1978; Rogers, 1951). The skill of a client in identifying and mobilising these resources needs to be facilitated. When the growth and development of the client has proceeded according to his genetic potential he will use these skills spontaneously. When the growth and development of the client has been encumbered and challenged by ADHD and by learning environments that have not been adapted to his developmental and growth needs, these skills will be difficult to mobilise (Rogers, 1951, Rotter, 1954).

4. Clients develop, grow and act according to internal (genetic) maps and the quality of their interaction with the environment in which they live (Erikson, 1950; Perls, 1978). When there is a miss-match between the clients genetic

map and the environment he lives in, he encounters obstacles in his way that slow his development and growth.

5. The diagnostics are not the Client (Perls, 1978; Rogers, 1951). Parents and teachers tend to see the diagnosis as the main feature of the child. It is common that the teachers and the family of children diagnosed with ADHD expect that this challenge be treated with medicines (Ritalin, Concerta, etc.). The medical treatment is expected to make the child manageable.

   To THR the children come untreated, long after the effect of the medicines he has taken in the morning has dissipated. The THR session is adapted to the child's needs and the learning of new skills and strategies is facilitated. The child is seen as a child eager to learn and experiment with new situations and mobilised to achieve his therapeutic vision and objectives..

6. Clients make the best and most creative choices that they believe will help them survive in the environment they live in (Perls, 1978; Satir et al., 1991). Psychotherapists such as Perls and Satir and others in the humanistic stream believe that the strongest forces driving the child's growth and development are the self-actualisation force and the need for survival. A client will always make choices that lead to his being able to survive in a given environment and will engage with that environment so that he may, in his judgment, self actualise (Barkley, 2009a, 2009b; Maslow, 1998; Perls, 1978; Rogers, 1959; Satir et al., 1991).

7. At an intersection on the development map, at the moment of choice, when making a choice is difficult, the path that leads to increased self-awareness is the best path to take (Perls, 1978). Increased self-awareness leads to the more effective management of personal resources and therefore to self-actualisation. Perls (1969) was known to counsel new therapists that when in doubt regarding their choice of the best therapeutic intervention in a given therapeutic situation, they should opt for working on increasing awareness. Such an approach contributes to the client's growth and development and helped uncover the issues the client brought to therapy.

8. Every behaviour is generated by a positive intention (Perls, 1978). When we analyse the behaviour of our clients it is most important to discover the environmental conditions that elicited it and that supported it.

9. The meaning of communication is the response it elicits and not the intention of the communicator (Rogers, 1959). The intention of the THRP or that of the parent or teacher may be to educate the child and help him have fun, however, screaming, shouting, insulting, sending the child to the Principal or marking his paper in red will elicit withdrawal instead of engagement, anger outbursts instead of self control, under-achievement instead of excellence.

   Resistance is a message about the communicator (the THRP for example). According to the humanistic stream of psychotherapy what has been identified as client resistance to therapy is in fact an effect caused by the miss-match between client and therapist and the therapist needs to change his behaviour or be replaced (Rogers, 1951).

10. If what you are doing is not working do something different. If what you are doing works, do it again (de Seizer, 1988; Rogers, 1951; Skinner, 2011). People learn from the successful use of their skills. Our clients learn from their own successes or by modeling the success of others (in Group THR). When our client uses a skill that does not result in success it is not considered failure but rather feedback (Perls, 1978; Rogers, 1951). The feedback is ‘ a new skill could be more successful’.

11. Everything we have learned to do can be learned by others through modeling us and can be modified (Bandura, 1988; Rogers, 1951; Wolpe, 1969).

In this section I am going to examine each of the above assumptions as they manifest themselves during Therapeutic Horseback Riding according to the Knowing Therapeutic Riding (KTR) model.

The first assumption emphasises that mind and body are part of the same human system and relate to each other. Balance must exist between the physical, emotional and the cognitive parts in the human system. The system is balanced in accordance to the quality of the interaction of the individual with the environment and in accordance to the dynamic properties of the individual (Perls, 1978; Rogers, 1951). The mind and body system of children challenged by ADHD, who live in environments that have not been adapted to their needs, reaches a balance that retards their development and growth creating deficits in the development and growth of the child. Deficits in development and growth are considered symptomatic in children challenged by ADHD. These deficits carry through social and academic environments, in the school and at home. During the therapeutic horseback riding session, the mind and the body must balance themselves differently when riding, because they must take the horse and the THRP into account. The new balance the child experiences and experiments with during his therapeutic riding session is being guided by his therapeutic vision. When the home and school environments change and become supportive of this new balance it becomes sustainable. A good example for this dynamic can be found in Saul's case. Saul who had good grades at school and was a good student, according to his parents' report during our first meeting, was not happy there: "***Saul is a good student, but he is unhappy in school"*** (Appendix G.4, Research Diary, p. 310). As a result of him not being happy he had various altercations with other students almost daily. Some teachers punished him for his behaviour. Saul's mother reported that these teachers thought that by punishing him they will teach him a lesson and **he will change his behaviour**:

> ***These teachers punish him, usually by asking him to leave the class. They think that by punishing Saul, he will change his behaviour. It simply does not help, on the contrary, he gets even angrier*** (Appendix G.1, Parents' Weekly Report, p. 305).

When Saul came to the farm for the THR programme, we talked about his anger outbursts. Saul was aware of the anger he had inside his body and told me on one occasion that:

> ***I am more like Papon*** *(*the horse Papon looked angry and was threatening the horse next to him) ***I would like to be more like Sol***

> (who was relaxed and ignored the other horses that tried to bother him) (Appendix G.4, Research Diary, Feb. 1st, 2012, p.310).

I recalled the basic assumption number one that speaks of the balance between mind and body. It was clear to me that Saul was out of balance, his mind was aware of his anger, but he could not control this anger. So I changed the THR session plan I had for that session to address more directly the problem that Saul raised. We worked on 'control'. Saul had to demonstrate control over the horse while doing tasks that needed precision like throwing a ring over a cone and throwing a ball and hitting a bottle on the ground. These tasks demanded the demonstration of skills of motor control and planning from Saul. He needed to move the horse and stop him in a place that will allow him to complete his tasks and succeed. Saul loved these exercises, it was a challenge for him and he loved being challenged. Saul demonstrated full control over the horse, I reinforced him by telling him how great he did and indicated that he had achieved full control. I asked him

> *how did it feel in his body to be in control. Saul smiled and said "great!* " (Appendix G.4, Research Diary, Feb. 1, 2012, p. 311).

We talked about transferring this achievement to his life outside the arena. I facilitated reflection by asking him how he could use this skill of control outside the arena. Saul said:

> *Whenever I will feel angry I will remember this, and how I succeeded to control the horse, and I will tell myself that I can succeed to control my anger outbursts.* (Appendix G.4, Research Diary, Feb.1st, 2012, p. 311).

At the end of the session I informed Saul's parents what Saul was working on and about his success to control his actions during riding. I instructed Saul's parents to reinforce Saul on positive behaviour especially whenever they noticed that he managed to control his anger outbursts. I worked similarly with Saul's homeroom teacher. Both parents and teacher reported that Saul's anger outbursts diminished in frequency. In school Saul had no anger outbursts and was reinforced for showing self-control.

Another example is Hillary who was aware of her anger outbursts and wanted to learn how to control her anger outbursts. During our first session, Hillary learned to stop the horse. I asked her:

> *Where else do you need to stop like this, when you are outside the arena?' her reply was quick: "**I need to stop my anger."** My reply to her was 'If you can stop this huge horse whenever you want to, it should not be difficult for you to stop your anger from flaring up' I said. 'Do you agree?' 'Yes! I can do this! I did it on my own!* (Appendix F.4, Research Diary, Nov. 23rd, 2011, p. 299).

During the following sessions, Hillary continued to bring examples of her success in controlling anger outbursts and we celebrated each and every time.

A good example for the application of the second assumption, which indicates that clients have a large inventory of skills, which they bring to therapy, can be found in my therapy sessions with Hillary. Hillary had the skill of being organised in her inventory of skills, but the valence of this skill was very low. During our first session Hillary learned how to be organised on the horse and in her preparations for riding. With the help of reflection on practice, I facilitated the transfer of value points to the skill of being organised, making it more dominant and facilitating its use more frequently by Hillary. While Hillary was learning how to be organised on the horse, I used frequent reinforcements to establish the skill in her repertoire of riding skills. During the session I proceeded to elicit reflection on practice showing Hillary the relevance of the skill just learned to the management of her experiences outside the riding arena. Through this practice I facilitated Hillary's recovery of previously learned skills that helped her to be more organised outside the arena, at home and in school. The next session the mother reported to me that: 'Hillary organised her bag for school and insisted on doing all her math homework' on a daily basis (Appendix F.4, Research Diary, Nov.24th, 2011, p. 299).

Anger control is another example of a skill that Hillary had in her inventory of skills, but the valence of this skill was very low. As mentioned in the example above, during our first session Hillary learned how to stop the horse. With the help of reflection on practice, I facilitated the transfer of value points to the skill 'stopping anger outbursts', making it more dominant and facilitating its use by Hillary. While Hillary

was learning how to stop the horse I used frequent reinforcements to establish the skill in her repertoire of riding skills. During the session I proceeded to elicit reflection on practice asking Hillary about the relevance of the skill just learned to the management of her experiences outside the riding arena and facilitated Hillary's recovery of previously learned skills that helped her function better outside the arena, at home and in school. Hillary understood the relevancy of the skills learned in the riding arena that enabled her to stop the horse to her being able to stop her anger outbursts and said: *"I need to stop my anger outbursts"*. (Appendix F.4, Research Diary, Nov. 16th, 2011, p. 299).

The third assumption holds that 'clients have all the resources they need in order to make changes in the system's balance and fine-tune it according to their needs. Our role as therapists is to trust in the client's ability and power to make the change he or she needs or desires. The THRP needs to facilitate the client's ability to enlist the resources needed for the change process being contemplated, and not to 'order' the client to change (de Shazer, 1988; Perls, 1978). This is done by eliciting reflection about previous instances during which the client had successfully drafted the internal resources needed to make a change.' A good example for the application of this assumption is my first session with Terry who was afraid to ride the horse and even though she agreed to mount the horse she held on to the saddle and her body was tense. In order to facilitate Terry's relaxation and to make her experience on the horse more pleasant, I asked her to describe and evaluate her fear of riding. Terry reported that her fear of riding was at the highest level, a ten, on a scale of one to ten (ten being the highest). During my work with Terry her fear of riding gradually subsided. The change in the level of fear was from a high of ten (10) to the lower value of one (0). Terry was able to make the change from being afraid to not being afraid by using her own resources and ability to do so, while I was next to her facilitating this change.

> *When she got on the horse she held on to the saddle horn. Her whole body was tight. I asked her to let me know on a scale of 1 to 10, 1 being the lowest and 10 the highest, how fearful she was. Terry reported that her fear was at the level of 10. I lead the horse and asked her to breath deeply. She took deep breaths. I talked to her and asked her to stretch her body. After 5 minutes the level of fear was reduced to 5. We walked slowly while she is holding one hand in the air and switching hands. The fear level went down to 3 and then to 0. She jogged, while on the lunge rope and said that she felt great. I*

> *have asked Terry to tell me what she gained by this session and she reported: I learned to calm myself and not to give up and that fear is something that I do to myself and I can also overcome it just like I did. I asked: How would you do it at home? Terry said that she would remember this lesson and overcome her fears everywhere else. She said that she is afraid to be alone and afraid to sleep at her friends' home. I told her that I was proud of her and how she succeeded to overcome her fear, I said: "you did it! Great for you! High five"!* (Appendix H.4, Research Diary, May 20th, 2012, pp. 317-318).

Terry continued to conquer her fears and a few weeks later reported that she succeeded in sleeping over at a friend's house, which she was afraid to do in the past.

The forth assumption indicates that clients develop, grow and act according to internal (genetic) maps and the quality of their interaction with the environment in which they live (Erikson, 1968; Perls. 1969). When there is a miss-match between the clients genetic map and the environment he lives in, the client encounters obstacles in his way that slow his development and growth. By all criteria Saul is a good student and his school grades showed it. However his environment at home and in school was not supportive of his development and Saul experienced frustration and difficulties. Saul came to therapeutic horseback riding in order to improve his quality of life. According to the teacher's report:

> *Saul is a restless child, moves constantly in his seat and it is hard for him to sit in class peacefully. According to his teacher Saul often behaves without thinking about the results of his actions, disturbs other children in the class, makes noises, is very sensitive and gets insulted easily, has difficulties in concentration, is influenced easily by others, does not understand fair play, blames others for his failures and has extreme mood swings. According to the teacher* ***this behaviour keeps Saul from reaching his potential*** (Appendix G.2, Teacher Report, pp. 307-308)**.**

In Saul's case in addition to coaching his homeroom teacher and parents to adapt the home and school learning environments to his needs, I worked with Saul on re-focusing his attention on his own achievements and on ways he could choose to maximise his achievements. Saul was asked to bring a list of successes every week to his therapeutic riding session. When he brought the list, we read the list together

and I helped him celebrate and amplify every success on his list. During the session we explored ways in which he could repeat these successes.

During a discussion I had with the homeroom teacher following Saul's completing of the therapy programme, his teacher said:

> *Saul has improved in all aspects of his behaviour and his academic achievement* (Appendix G.2, Teacher's Report, p. 308).

The fifth assumption indicates that 'the diagnostics are not the client'! The humanistic approach to therapy requires the THRP to see the child as a unique and creative individual willing to learn and experiment with life experiences. The children came to me diagnosed as having ADHD. Both teachers and parents treat the children as children diagnosed with ADHD, who are not disciplined and cannot sit quiet for a moment, always in motion and restless. According to the participants' reports, teachers and parents raise their voices and scold these children, or they have them removed from the classroom to be scolded by the principal. The KTR THR model changes the focus of THRPs, parents and teachers, so that they can discover the uniqueness in these children, and see them as creative children who want to learn and be appreciated by others.

This shift of focus allows the parents and the teachers to take responsibility for the way they have engineered the children's learning environments and motivate them to adapt the environments at home and in school to the needs of the child challenged by ADHD. A good example of the application of this assumption can be found in my work with Hillary. With my guidance, the moment the mother changed the way she viewed Hillary and her focus was on Hillary's ability to do things and to be creative, the dynamic of their relationship changed to a positive, caring and loving relationship. The mother reported to me that:

> *It is like having a new child at home…Hillary* ***let me touch her and hug her,*** *she did not like it before* (Appendix F.1, Hillary's Parents' first Weekly Report, p. 291).

The sixth assumption indicates that clients make the best and most creative choices that help them survive in the environment they live in (Perls, 1969; Satir at el., 1991). The forces driving the child's growth and development are the self-actualisation force and the need for survival (Barkley, 2009b; Maslow, 1998; Perls,

1969; Rogers, 1959; Satir at el., 1991). The KTR model promotes the design of the learning environment so that it fits the needs of every child. Children engaging with the KTR programme have an opportunity to be bold and creative, to develop mutually supportive relationships with the THRP which can later translate to the building of similar relationships with their peers in school, with other siblings at home and with parents and teachers. In Hillary's case her mother reported dramatic changes in Hillary's behaviour following the changes she introduced in her home environment. Hillary became calmer and happier: On the second Parent's Weekly Report, Hillary's mother noted that Hillary became calmer*:*

> *Hillary is* ***calmer and happier than before,*** *it is nicer to be around her. Now that the teacher is involved with the therapy and after you spoke to her, things started to change. Also Hillary enjoys so much riding on the horse and what you tell her during the lesson helps her so much. Hillary says that to me. She is a different girl from before the riding. She even stopped wetting her bed. You probably did something about it too* (Appendix F.1, p. 292).

The teacher reported that the parents are more involved:

> *There is* ***more cooperation from the parents with the school.*** *They ask about Hillary more than in the past and they are willing to hear what is told to them. In the past they denied that Hillary has a problem due to her having ADHD, today they are willing to accept it and they changed their attitude towards her. It seems like to me that the parents are investing more quality time with Hillary, they reinforce her positive behaviour, all this is shown very well in the big change that Hillary has made. I also see a change in her social skills, even though there is still a problem. Hillary does not have many friends in the class, also because she looks bigger than the rest and also because they do not live close by* (Appendix F.2, Teacher's Report, pp. 294-295).

The mother and the teacher's reports show that in the opinion of the teacher and the mother, the THR programme is effective. According to the mother, the teacher adapted the teaching environment to Hillary's needs. In turn Hillary's behaviour changed. The teacher reported that the parents made changes in their environment and adapted it to Hillary's needs. In turn, Hillary's behaviour changed at home.

The seventh assumption was that people at the moment of choice should choose the path, which increases self-awareness. During the fifth session Hillary seemed tense

and preoccupied, (Appendix F.4, Research Diary, Dec. 21, 2011, p. 300) I asked Hillary if she faced any dilemmas, and Hillary responded in the affirmative, and reported that:

> *Two friends asked me to stay over in their house. I don't know to whom to go.* (Appendix F.4, Research Diary, Dec. 21, 2012, p. 300).

I have adapted the lesson to facilitate Hillary's awareness to what is happening to her and to how she feels about it. We entered the arena and I asked her to choose between two tasks according to the one she favors the most. Hillary said that she liked both tasks and that she would like to do both of these tasks one after the other and asked me if it is possible? I agreed. Then I heard Hillary scream with delight:

> *I can do the same with my friends, I like them both and I can go to one friend one day and to the other the next day. This really helped me to make my decision* (Appendix F.4, Research Diary, Dec. 21, 2012, p. 300).

The eighth assumption indicates that every behaviour is generated by a positive intention (Perls, 1969). When we analyse the behaviour of our clients it is most important to discover the environmental conditions that elicited it and that supported it (Bandura, 2011). Behaviour is elicited and shaped by the environment and through interaction with stakeholders active in the environment. Individuals behave in ways, which are supported by the environment. All behaviours, which are not supported, become extinct (Skinner, 2011). A good example of this assumption is Hillary's use of a technique she had learned while in the THR programme, in her home environment when she felt an angry reaction being elicited. Hillary, who had learned to stop her horse by going through several steps that 'bound the horse' and prevented him from going out of control, decided to use a similar technique to control anger outbursts which were elicited by her home environment. Specifically Hillary broke contact with the stimuli that elicited the anger outburst by going to her room, in the same way that she would break the contact the horse she was riding had with stimuli that elicited the horse's out of control behaviour, by turning his head. When Hillary reached her room, she would hug herself in an effort to restrain her emotions and behaviour in a way she felt was similar to the way the horse was positioned once the emergency stopping procedure was applied:

> *Hillary indicated that she was still using what she considered to be riding skills at home and in school. For example Hillary reported that she was using a technique used to stopping a horse during an emergency situation, 'emergency stopping' which I taught her, at home or in school to better control her anger outbursts. Hillary reported that when she felt an anger outburst coming on, she hugs herself real close to stop the anger outburst and when at home she goes to her room and hugs herself tightly until the anger passes. "It works for me!" she said. This procedure is very similar to the one used by horseback riders to stop the horse. Hillary was able to transfer skills learned during THR from the first day we started THR and she was still using the skills and strategies she learned during our sessions after seven months* (Appendix F.6, Seven months after therapy, p. 304).

Another example is Terry's realisation that her fear and anxiety is a result of her own production and once she understood that she can overcome her fear of riding a horse she was able to deal successfully with her fears that prevented her from sleeping over at her friends' homes:

> *I learned to calm myself and not to give up and that fear is something that I do to myself and I can also overcome it just like I did. I asked: How would you do it at home? Terry said that she would remember this lesson and overcome her fears everywhere else. She said that she is afraid to be alone and afraid to sleep at her friends' home* (Appendix H.4, Research Diary, May 20th, 2012, p. 318).

The ninth assumption indicates that the meaning of communication is the response it elicits and not the intention of the communicator (Rogers, 1959). This assumption shaped my relationship with my clients. After having observed THRPs using aversive control techniques by shouting orders and screaming at their clients and having analysed the interviews conducted with parents of children in THR programmes reporting that there was no change in the children's behaviour at home or in school, I came to the conclusion that THR practice needs to be free of aversive control.

Following a communication that I directed at my clients, I analysed their reaction to see the meaning they derive from this communication. An example for the application of this assumption is my work with Saul during the tenth session. Saul had come to the farm preoccupied and I asked him to change the way he held the reins and even though I asked it repeatedly Saul reverted to the incorrect grip on the

reins that he had started with, after every correction. I asked him to stop the horse and reminded him of the previous lesson during which he had held the reins perfectly and then asked him if there is something preventing him from doing the same that day. Saul said that he was upset:

> *He reported to me that he was blamed by his friends in school for throwing a pencil case at one of the students and the teacher was vey upset with him. Saul said that he did not do that* (Appendix G.4, Research Diary, May 20th, 2012, p. 312)

I realised that I needed a strong stimulus that could bring Saul's attention back to the lesson and focus him on the here and now (Perls, 1978). I asked Saul if he would like to go out on a field trip on the horse. Saul was enthusiastic. I repeated my instruction regarding the correct holding of the reins. Saul immediately corrected himself and we proceeded on our trip outside the riding arena. In retrospect, my work, which is based on this assumption of the KTR model, allows me to work calmly and completely focused on the needs of my clients without neglecting my own needs.

The tenth assumption indicates that if we do something that works for us, we should repeat our actions, and if it does not work for us, we should do something else (de Seizer, 1988, Rogers, 1967, Skinner, 2011). The KTR model is based on this assumption and requires KTRPs to inventory successes, amplify success and celebrate it. This was one of the most important parts of the therapy programme and every session started with reviewing a list of successes accumulated over the pervious week. This way the child became aware of his successes and could do more of what brought him success. For every success the child brought to the session I asked the following question after amplifying: 'Wow! This is great! How did you succeed to do it? Will you be able to do it again? I know it must have been difficult for you, where did you get the strength to succeed?'

On the seventh week of therapy, Hillary brought a long list of successes,

> *We went to visit my grandmother for the weekend and grandma explained to me how to get to a girl who lives in the neighborhood. I drew a map and I succeeded to get to that girl all by myself and I enjoyed playing with her. I also succeeded to play with my brother at home and in the yard where there was a duck and I succeeded to move the duck away from us. In addition, I help my mother a lot in the house*

> *and with our new baby. At school, the teacher told me that I have improved a lot, and I am very happy about it. I also succeeded to stop two girls from fighting. I looked at them and I asked them why they fought and after they told me that it was over a stone that they found, I told them there was no reason to fight over it. I gave each one of them a candy that I brought to give at school on the occasion of the birth of our new baby, and they promised me not to ever fight again* (Appendix F.3, Hillary's success list, Seventh week report, p. 296).

When I asked Hillary

> *...how do you succeed, how do you do all that", her reply to me was: "It is all because of the horseback riding." I continued to ask: How is it because of the horseback riding? Can you explain?" Hillary's answer was: "everything that we do together, and what I do on the horse, when you tell me to do something with the horse, I listen and I pay attention to what you tell me and I concentrate, I look at the horse, and I do it successfully. At school I do the same, I concentrate on what I was told to do by the teacher and I do it. I succeed much more than in the past, before I started to ride on the horse* (Appendix F.3, Hillary's Successes list, p. 296)

Hillary's list of successes of which I brought only the above example, showed successes both at home and in school. Some of the successes were reported from additional environments where she found herself.

The eleventh assumption indicates that everything we have learned to do can be learned by others through modeling us (Bandura, 1988; Rogers, 1951; Wolpe, 1969). A child learns directly from overt interaction with the environment learning resources (parents, teachers, peers), he also learns indirectly by modeling the behaviour of those he sees. It could be parents, teachers or THRPs. The design of the KTR model for therapeutic horseback riding is such that it supports organisation, stability, listening and reflection. The extension of this assumption explains how the THR clients can model their behaviour in various and very different environments (home, school, community) by using their experiences during THR sessions. Hillary's mother reported that:

> *The fact that you met regularly every week at the same time was very important to her and added continuity and stability to her life* (Appendix F.5, Parents' letter to me, p. 304).

Following THR sessions Hillary showed signs that she adopted these values. She prepared her school bag a night before; she arranged her room and did her homework.

Terry's mother also indicated in her letter to me that:

> *Terry learned from you how to be patient and how to listen. We can see a great improvement in her advancement. She learned to listen, to take responsibility and to act and do chores independently.* (Appendix H.5, Parents' letter to me, p. 321).

Answers to the Research Questions

5.4 How can the Therapeutic Horseback Riding Practitioners (THRPs) facilitate the learning of new skills the client needs, in order to cope more effectively with his/her therapeutic objectives?

The current research findings show that according to the KTR model THR practitioners must create a therapeutic environment in the riding arena where new skills and learning strategies can be learned by the client, and used in order to achieve more effectively his therapeutic vision and objectives. The learning processes taking place in the riding arena are supported by strategic alliances the THRP must enter into with the client, his parents and his teachers. The learning processes are based on learning from successes, and on reinforcing successes and the progress the client makes toward achieving his therapeutic objectives and realising his therapeutic vision. New skills and strategies are amplified by the THRP and by members of his strategic alliances and the THRP needs to facilitate their transfer to the parallel learning environments where his client needs to cope with social, emotional and intellectual challenges. The THR practitioner must facilitate a growing awareness among parents, child and teachers that THR is therapy and not a recreational activity.

During the Intake valuable data was collected regarding the client's symptomatic profile. The data was later validated by additional data collected from the teacher.

Parent(s), client and THRP constructed a therapeutic vision and therapeutic objectives were defined.

Three cases were studied and reported in this research. The client in each case had his own or her own vision and therapeutic objectives, which were constructed at the first meeting of the therapy, the Intake. In Hillary's case her vision included better days without anger outbursts and frustrations, developing an ability to follow verbal instructions and take notes from the blackboard, being organised, being able to start things that needed to be done and complete them, being able to concentrate and be in focus, building a positive self-image, being able to make friends and keep them and stop nocturnal bed-wetting.

The findings show that Hillary reached her therapeutic objectives and fulfilled her therapeutic vision following the process of therapeutic horseback riding (Appendix F). Hillary had better days without anger outbursts, she was able to follow verbal instructions and copy from the blackboard, she became more organised and was able to start things and complete them. Hillary gained the ability to concentrate and to focus. She gained a positive self-image and her social skills improved and she was able to make friends and keep them. Hillary stopped wetting her bed at night, following just a few weeks of therapeutic horseback riding sessions. When asked how she succeeded in stopping the bed wetting, her answer was that she felt good and more confident, in control and sure of herself since she started THR and the wetting just stopped by itself (Appendix F.4, Research Diary, Feb. 15Th, 2012, pp. 300-301).

In Saul's case his therapeutic vision, like Hillary's, included better days without anger outbursts and frustrations, days when he is not postponing doing tasks that needed to be done. In addition the therapeutic objectives were to improve his listening skills, improve his self-image and improve his organisational and concentration skills.

The findings show that Saul reached his therapeutic objectives and fulfilled his therapeutic vision (Appendix G). Saul's therapeutic vision identified the control of anger outbursts as his major challenge. The achievement of Saul's therapeutic

objectives was accomplished rather quickly. After ten therapeutic sessions Saul reported, as part of his successes, that he had no anger outbursts. These reports were supported by reports from his parents and his teacher. However, after session twelve there were fluctuations in his ability to control his anger outburst. From my conversations with his parents I learned that in spite of the training they received from me on how to design a home learning environment free of aversive control, they were not able to create a home environment free of aversive control. A leading example of the use of aversive control was the time when Saul's father threatened that he will take the money for the THR sessions from Saul's allowance if Saul will not be ready on time and would be late to his THR session on the farm (Appendix G.4, June 17th, 2012, p. 312). Environments that are not free of aversive control can provide support for anger outbursts thus preventing the extinction of that behaviour.

A similar fluctuation of behaviour was found in Hillary's therapeutic process. Hillary reported an instance when her father slapped her and yelled at her (Appendix F.3, p. 297). This evidence indicated that whenever the environment does not support the new skills and strategies that the child learned during THR, those skills will not last and a decline in the level of the skills learned will be observed. Only when the parents cooperate with the THRP, and create an environment free of aversive control, which supports the newly learned skills, can these skills be transferred and sustained in the home environment.

In Terry's case the vision was to become a child who is being able to concentrate, follow verbal instructions, complete homework and other chores, be in focus and do not get emotionally hurt easily. The most important objective for Terry's parents was that she would listen to them and be organised. The findings show that Terry achieved her vision and objectives. At the end of thirty therapeutic horseback riding sessions, Terry received from her parents the highest score of 5 in every one of the skills learned (Table 19, p. 165).

Creating an alliance between child, THRP, parents and teacher is a very important factor for the success of the THR programme. Collaboration between all parties was encouraged and formed. Each party had an important role in the therapeutic process. Parents submitted a Weekly Report, the child submitted a list of successes and the

teacher submitted a periodic report. The THRP was in touch with parents and teacher to gather important information on the child's advancement. When needed, the THRP changed the session plans to accommodate the needs of the child at that time.

It was important to build a positive relationship between all parties and to encourage the child to become an active partner in the therapy and be aware of the therapeutic objectives and agree with them. These findings are supported by Yagil's approach to therapy, which emphasises the need for the forging of therapeutic alliances between significant stakeholders in the therapy, such as, child, parents, therapist and teacher (Yagil, 2008).

During THR Hillary, Saul and Terry were asked to bring a list of successes they collected during the week. The children were able to reflect on their successes and to learn from them so they could achieve more successes. Our focus was on success and not on failure and what did not work for them during the week. We celebrated the successes. The children's parents also were taught how to celebrate successes including the ones they earned during the therapeutic horseback riding sessions.

In conclusion, this research explored and described the effect of therapeutic horseback riding conducted according to a new model developed by the researcher, the KTR model, on children who have been diagnosed with ADHD. These children who have turned to Therapeutic Horseback Riding bring to therapy the skills that they have learned since birth in their home environment, in social circumstances and in the various educational environments from kindergarten to high school and beyond. When problems are solved using a certain skill the valence of that skill rises by some factor increasing the chance that that particular skill will be chosen when similar challenges are faced. Over time, some skills become dominant and form the repertoire of skills, which is a group of leading skills. The repertoire of skills is dynamic, adaptive and selective (Bandura, 2011; Skinner, 2011). In Hillary's case and in Saul's case, anger outbursts were a dominant pattern of behaviour with the help of which the children were able to control their environment. As skills that contributed to the child's ability to interact successfully with his learning environments became dominant, among them the skill of

controlling anger, anger outbursts lost their dominance and instances of anger outbursts became less frequent and eventually extinct.

An analysis of the repertoire of skills belonging to a child diagnosed with ADHD reveals that some of the skills he has acquired are complete but have a low valence and will therefore not be picked as part of a strategy designed to solve problems. Other skills are incomplete or not adapted to the environment in which they are used and are therefore not likely to lead to success when used. Some skills function properly and some skills, that are usually part of a same age child's repertoire of skills, are missing from the repertoire of children diagnosed having ADHD (Barkley and Murphy, 2006; Pilszka, 2009).

The repertoire of skills needs to be precisely inventoried when clients engage with therapeutic horseback riding and in the KTR model the individual skill is the unit of analysis and evaluation and contributes to the design of the therapeutic programme.

5.4.1 The Learning of Skills

A skill is a chain of problem solving behaviours that endows the learner with the capacity to carry out successfully and efficiently specific tasks. For example, the skill of copying accurately from the blackboard, which is necessary to complete homework. Or the skill to organise one's school bag the night before so that no learning aids be forgotten at home, is necessary for efficient functioning at school. Or the skill to make and keep friends that requires the appropriate and responsible management of interpersonal relations. These skills are normally acquired through teaching or direct/indirect experiencing (action learning and social learning). In the case of children diagnosed with ADHD the learning environment and the teaching techniques used must be adapted to the special needs of the child or no learning can occur.

Learning environments need to be engineered in such a way that they be rich in reinforcing events and be devoid of aversive events. At the beginning of the learning process skills are shaped from a variety of behaviours some of which may be inappropriate. As successes become associated with skills the demand for increasing accuracy and efficiency in the shaping of the skill grows. Thus certain

behavioural configurations of a skill are reinforced and gain in valence while others are not and become extinct (Bandura, 1988; Rotter, 1993).

At this point it is important to remember that clients engaging with THR have a varied and creative skill inventory. THRPs often make the mistake of viewing THR clients as having no skills whatsoever. This response of THRPs is to be avoided at all costs because it mimics the response ADHD clients have experienced in other un-adapted environments such as learning environments in school and at home. This type of response will prevent the client's engagement with the programme in the same way it prevented their engagement with the school programme and with family life at home. As they grow and develop clients build a repertoire of useful skills. When facing a task or problem that requires a solution, clients will always choose a skill or skills that are the most creative of the skills in their repertoire that they believe will help them survive in the environment in which they must operate (Perls, 1978). When a client will choose a skill that is considered by others as inappropriate or apply that skill with excessive energy he will do so because the environment has not been adapted to his needs and he has come to the conclusion that this is the only strategy that can ensure his survival in that environment (Perls, 1978).

The next THR point to remember has to do with the shaping of skills and the teaching of new skills designed to fit in the client's repertoire of skills. Clients will only learn skills that are supported by the teaching environment in which the skill is being taught. Skills that are not supported by the learning environment become extinct. Skills that are supported by a variety of learning environments increase in valence and become resistant to extinction. Quite often during the course of a THR programme a client or other stakeholders such as the client's teacher or one of his parents will report a relapse in the learning process. For example a THR client that has learned to control his anger outbursts in the riding arena and has successfully transferred the skill to the environment at home and at school will bring to his THR session a teacher's report indicating that the anger outbursts have recovered. In such a case, skill analysis indicates that the client is being asked to operate in a school environment that supports anger outbursts (principal scolds a student or a teacher; a teacher acts with anger when a student fails to pay attention) and the redesign of the

school-learning environment is indicated. The re-design of the learning environment will remove all support for anger outbursts from teachers or students. Furthermore the THR programme needs to be adapted so that it addresses the strengthening of the therapeutic strategic alliance between THRP, parents and teachers and reshapes the control of anger outbursts skill whose valance might have been lowered by the inhospitable school environment (Bandura, 1988; Rotter, 1966).

Examples of a relapse in skill level can be seen in both Hillary and Saul's cases. In both cases a fluctuation of behaviour was found. In Hillary's case, during the week she reported that her father slapped her and yelled at her (Appendix F.3, p. 297), the score her parents gave for being calm (no anger outbursts) was lower than the week before. This evidence indicated, as already mentioned, that whenever the environment does not support the changes that the child has made in his skill repertoire, the changes will not last and a decline in the level of skills learned will be observed. Only when the parents cooperate with the THRP, and create an environment free of aversive control, and which supports the learning of new skills, these skills will be transferred and sustained.

5.4.2 Shaping a skill

Children diagnosed with ADHD may have difficulty in maintaining concentration over a long period of time. In order to accommodate them, the THRP must start with short tasks that can be completed successfully in less than 15 minutes, reinforce success and even partial success and slowly shape the skill until it consistently leads to success within the parameters of the task. Skills that are reinforced become dominant as their valence within the skill repertoire increases (Bandura, 1988).

As the child diagnosed having ADHD learns to use skills efficiently, more complex tasks can be assigned and precision in the execution of the task must be reinforced. A skill is considered to have been learned if the execution of the task employing that skill produces learning outcomes of excellent quality (100%) efficiently (parameters of time and energy expended are used for the assessment of efficiency) and the quality of the learning outcome has acquired reinforcing value (the reinforcement is internalised). In order to attain such results THRPs must be seen as

reinforcing agents through and through and must not resort to punishment or criticism. For example, in Hillary's case, the skill of organisation was reinforced and became part of Hillary's repertoire. Prior to starting therapy, Hillary used to organise her bag for school in the morning, when she was under pressure not to be late, which led to her forgetting some of the items she needed. With our new focus on organisation and Hillary's reflecting on her skill of organisation, she started to arrange her school bag in the evening, when she had more time for it and was less likely to forget items she needed. The skill of organising the school bag and preparing homework was there for Hillary before therapy started, except that now she was using it to her advantage.

5.4.3 Reinforcing Agents and Sustaining Environments

In order that the learning outcomes produced by clients who have engaged with THR programmes be of excellent quality and be produced efficiently it is important that we understand how these outcomes are planned and produced, whose responsibility it is to produce them and under what conditions they can be produced. The learning outcomes in a therapeutic relationship are of two kinds. The learning outcomes produced by therapist and client within the therapeutic setting and the learning outcomes produced by the client with members of the strategic alliance, which could be parents, siblings, teachers, the client's friends and co-workers. The quality of the learning outcomes is dependent on the clients' repertoire of skills and on the design of the learning environments the client operates in.

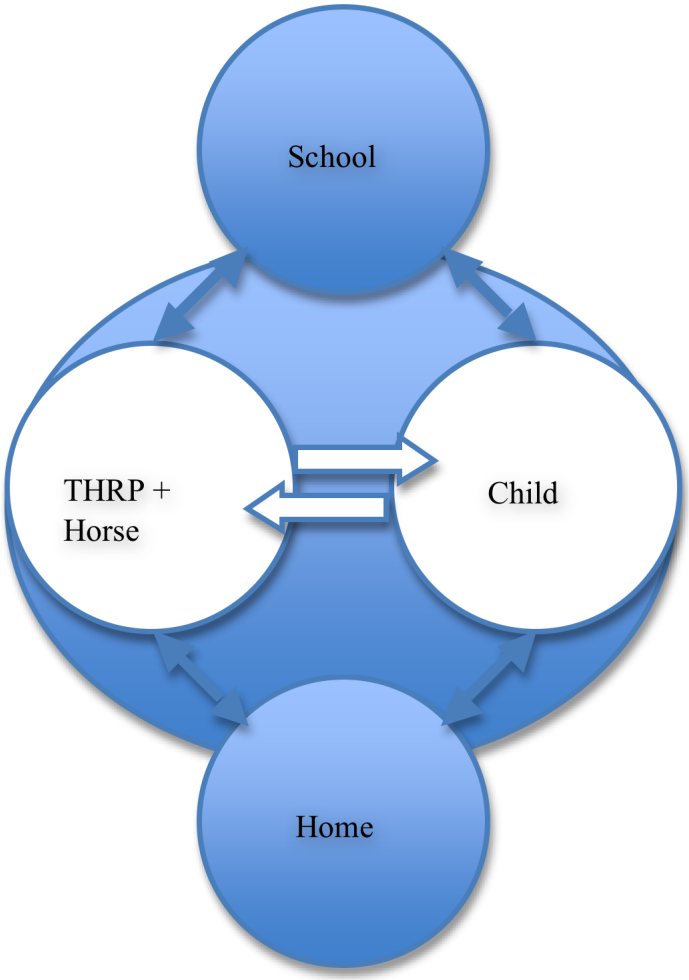
The role of the THRP is to facilitate the acquisition of the skills required by the client in order that he be able to participate effectively in the production of the learning outcomes. The facilitation of learning processes is possible if the THRP maintains his status as reinforcing agent throughout the programme. Maintaining the full status of reinforcing agent means that the THRP will use only positive control techniques as he teaches and models the use of skills and their application. When aversive control methodologies are used during THR very little learning, if any, occurs and the THRP looses his reinforcing agent status.

In order for the THR client to be able to produce quality learning outcomes in other learning environments such as the school and the home, members of the family and teachers must be trained in the skills of adapting the learning environments they

operate in to the special needs of the client and must be trained as reinforcing agents.

If the training succeeds, the school and family environments become sustaining environments, the skills become stronger and the quality of the learning outcome is assured.

Learning Process During Therapy

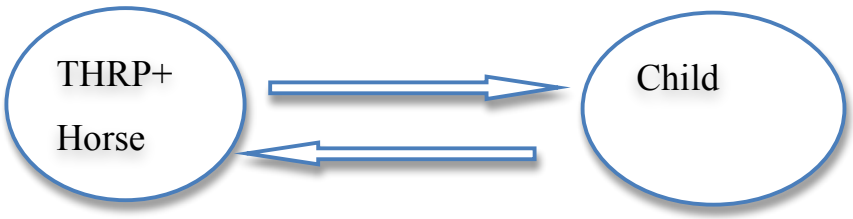


This diagram suggests that, according to the KTR model, the process of learning is taking place between the therapeutic horseback riding practitioner assisted by a horse and the child on the farm. The KTR model requires collaboration between all major stakeholders: the home, the school, THRP and the child. When this

collaboration is achieved, learning is supported on the farm, during THR and off the farm, at home and in school.

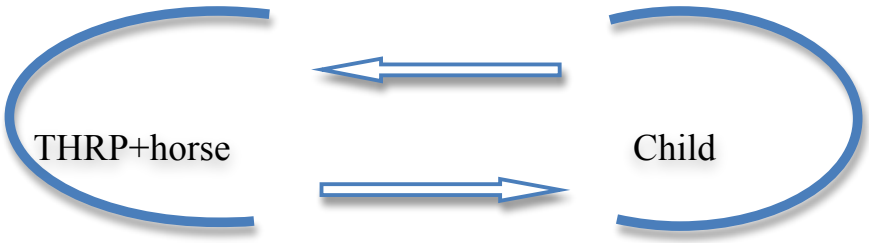
The process of learning is taking place in three stages:

Stage one:



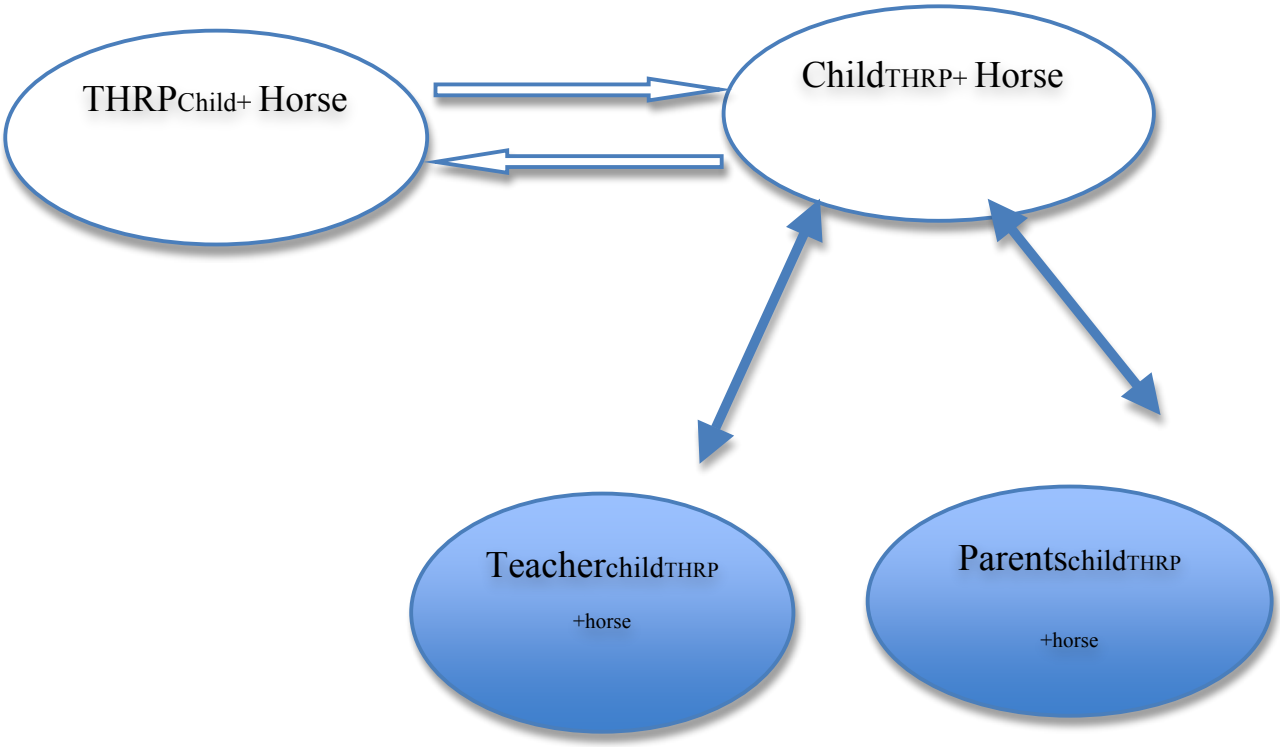
Stage one typically occurs at the beginning of the session. THRP and child arrive for the session, each bringing the burden of the days experiences and stresses to the meeting. During this meeting the THRP and the child make first contact.

Stage two:



In stage two, the list of successes that the child has accumulated is produced and the successes are read and celebrated. The reading and celebration of the list of successes facilitates the 'opening up' and information is exchanged and new knowledge is created. For example, as successes are being celebrated the valence of skills instrumental in achieving these successes is upgraded in the repertoire of skills.

Stage three



Stage three is a closure stage. Learning is internal, mostly meta-cognitive. Reflection is being facilitated by the THRP and the relevance of skills learned during the previous stages of THR to the parallel learning environments, outside the arena, in which the child needs to function, is being explored. Once closure occurs, parts of the child's experience become imbedded in the THRP's experience. Similarly, parts of the THRP's experience become imbedded in the child's experience. As an example, we can see that when the THRP reinforces the child's behaviour, the representations of the THRP's values (which led to the reinforcement) become part of the value system of the child. Specifically, when the THRP reinforces 'organisation', 'organisation' becomes part of the child's value system. When the child reports on his successes in the learning environment outside the arena (the home and the school), the THRP celebrates these successes with him and amplifies them. When the child reports a set back, the THRP will adjust his teaching to prevent future set backs in the child's experience.

The above diagram also shows an interactive exchange between child and teacher and child and parents. When the child experiences during THR are transferred to the classroom and are reinforced by the teacher, the valence of the skill learned is amplified and can take root as part of the child's daily experience in school. Similarly, when the parents reinforce a skill learned during THR, the valence of that skill is amplified and the skill becomes part of the child's repertoire of behaviour.

5.5 How can THRPs facilitate the transfer of learning skills acquired during the student's participation in the THR programme to other learning environments?

The facilitation of the transfer of skills learned in the arena was part of every THR session that I conducted. At the beginning of every session the child presented a list of successes. The child accumulated the successes over the past week and I looked for evidence that the successes gained by the child were due to the transfer of skills learned during the pervious session or pervious sessions. After each success was presented the child was asked to reflect upon it (I would say: How did you do it? Or, who else noticed your success? How can you continue to succeed?). In Hillary's case, her mother reported already after the first session that Hillary insisted to do all her math homework and to organise her bag for school, things that she did not do in the past, according to the mother. The mother indicated that Hillary had become more organised and that she related it to the therapeutic riding sessions. This evidence is an indication of the transfer of the skill of 'organising oneself' in the THR arena to 'organising oneself' at home.

In addition to the transfer of learned skills there was a transfer of interpersonal skills. The relationship between the therapist, horse and the child was transferred to the relationship between mother and child. For example, on the farm Hillary was hugged and hugged in return especially when celebrating successes. She brushed and hugged her horse. The mother reported that Hillary let her touch and hug her, which she did not like to do before she started THR. Research conducted on the relationship between children and animals supports these findings. Corson et al. (1977) for example showed that positive relationships between children and animals in therapy contribute to a positive perception of the child of other people and to the

development of intimacy with others (Corson et al., 1977). These findings were also supported by the work of McNicholas and Collins (2000), Messent (1983) and Lockwood (1983).

In addition, Hillary's parents wrote in their letter to me:

> *The therapy and the riding on the horse along with the transfer of skills to everyday life that you taught Hillary, led her to emotional maturity* (Appendix F.5, p. 303).

In Terry's case, at the beginning of session four (Appendix H.4, Research Diary, June 24th, 2012, p. 318), she reported the success she experienced during music lessons. Terry was now able to concentrate during music lessons (chorus) in school. When asked 'how did you do it?' her reply was that the riding on the horse and our talk during the riding about concentration, helped her to concentrate better also in class.

The sessions also provided opportunities for triggering transfer during the course of the session. When a new skill was taught and practiced, once it was mastered I used to ask 'Wow, well done! How did you succeed to do it? Where else can you do it? Who else would notice it once you do it?

One of the major tasks of THR is to facilitate the transfer of skills learned or strengthened during THR to other learning environments in the home and at school. This is the task of any therapist (Green, 2003; Yalom, 2002). Transfer of skills is not spontaneous and did not happen in most of the cases investigated during the pilot of this research (Salomon and Perkins, 1987, 1989). The findings indicated that it was necessary to facilitate the transfer of skills learned during the THR sessions to the home and school environments.

These findings support the findings of other researchers and were found to have high external validity (Green, 2003; Salomon and Perkins, 1987, 1989; Yalom, 2002)

These findings were incorporated in the manual, which provides instruction for training parents, teachers and THRPs to adjust learning environments so that they will support the behavioural changes made by the child. The goal was to create a **strategic alliance** between THRPs, parents, and the child during THR. This alliance

was not found at the THR farms, which I researched during the pilot stage. Once the manual was completed, it was validated with the help of THR experts.

5.5.1 Strategic Alliances

Almost no research has been conducted in order to evaluate the effectiveness of THR for ADHD challenged children. What little research was reported (Basile, 1977) showed only marginal results.

In order to showcase the results of his work the THRP working according to the KTR model is required to form strategic alliances with the parents and teachers of the child in therapy. Such an alliance was urged by Basile (1977) who blamed, at least partially, the lack of such an alliance as the cause for the marginal results she obtained. The KTR Model of THR assumes that forming these strategic alliances facilitated the transfer of skills from the riding arena to the home of the client and to the school the client frequents, amplifying the effect of THR.

Furthermore it was shown (Kreindler and Kreindler, 2012) that the formation of strategic alliances led by THR practitioners contributed to the effectiveness and sustainability of the therapy. Following the principles of the KTR Model once therapeutic objectives were achieved they were celebrated in the riding arena, in school and at home.

5.5.2 What the Alliance Requires

The KTR Model required that the foundations of the Home-School-Therapeutic riding farm therapeutic alliance be set at the time of intake. In this research during the intake, the THRP explained to the client and to the accompanying parents the goals of THR, collected the information necessary to facilitate the building of a common therapeutic vision and marked the steps to be taken towards the realisation of the common therapeutic vision using therapeutic objectives as milestones. The therapeutic objectives were chosen in the order of their significance to the client, to the parents and to the homeroom teacher. The higher the priority assigned to a therapeutic objective the more likely it was that that therapeutic objective was chosen as one of the first milestones.

The first and most important requirement of the alliance is the radical change of the home and school learning environments so that they are adapted to the needs of a child challenged by ADHD. The learning environments at school and at home should focus on the client's successes, on his newly evidenced skills and on his riding experiences, celebrating each success and reinforcing each skill the client is demonstrating.

Homes and schools mirror the social paradigm that is based on punishment and criticism. Punishment and criticism (aversive control) are an insurmountable obstacle to the development of learning processes and to the transfer of skills. Aversive control should be abandoned at home and in school even though that is a hard undertaking. The KTR Model is based on humanistic values, chief among them, being the exclusive use of positive control. Once the school and home environments were adapted accordingly, learning processes and the transfer of skills from one adapted environment to the next developed rapidly. For example if 'being organised' is the first milestone chosen since it created great problems at home and at school for the client, the THR lessons would be centred around planning and organising the riding experience. I celebrated together with my client the fact that he arrived for his session with all his equipment and on time and at the same time instructed his parents and home room teacher on how to adapt the home and school environments respectively to the needs of the child.

These successes were communicated to the client's parents and teacher who in turn created time for family and class discussions of the client's successes. In addition I asked the client to reflect on the utility of the newly learned skills in the home and school learning environments and reinforced the discovery of the applicability of 'planning and being organised' to these other environments.

The client's teacher coached by me, noted with pleasure when the client arrived to school with all of his books, notebooks and homework and was appreciative of his success. Similarly the client's parents noted with pleasure the fact that the child is picking up his room, organising his school bag the night before and doing his chores. The client reported these successes during his next THR session and he and I celebrated. Parents and teachers reported these successes on the respective Report

Forms and upon receipt the client and I celebrated these successes again and made them the focus of the opening remarks of the respective sessions. In this way, new skills were shaped and their valence was amplified leading to accelerated learning.

Here is an example of the typical remarks I made as I received the client's list of successes: 'Wow! How did you do all of this? 'Where did you get the energy?' 'Did your parents notice when you picked up your room?' 'What did they say?' 'That's power! Give me a high five!' 'How did you feel about it?' 'Wow! And did any one notice that you had all the homework and a complete school bag in school?' 'What did they say?' 'How did you feel about it?' 'Can we do this again?" 'What will you need for that?' 'Wow, you are on your way! This was one of your therapeutic goals!' 'Let's celebrate and learn something new today!' These questions were chosen in order to facilitate the amplification of the valence assigned to new skills the child learned during THR. de Shazer (1988) has shown that such questions facilitated the amplification of new skills and strategies learned during therapy.

From session to session, and each day between sessions, at home or at school the skills of planning and being organised became more dominant in the client's repertoire of skills and became more likely to be used when the child would face a challenge. These changes were so strong that the mother commented: *"It is like having a new child at home"* (Appendix F.1, Hillary's mother Report, p. 291).
The therapeutic alliance between client, THR, parents and teachers facilitates the transfer of skills between the home, school and THR arena. The stronger the alliance, the stronger the growth and development processes the client engages with (Rotter, 1993).

When the common therapeutic vision was formulated it took into account the homeroom teacher's evaluation, the parents' evaluation, the client's evaluation and the Therapeutic Horseback Riding Practitioner's (THRP) evaluation. This procedure recognised the fact that the teachers, the parents, the THRPs and the clients were all stakeholders in the therapeutic vision, this being the reason why it is called a **common** therapeutic vision. The common therapeutic vision is the first step in the creation of the strategic alliance between child, THRP, parents and teacher. The common therapeutic vision defines the strategic alliance and becomes the engine

that provided the client with the motivation and energy to realise and sustain the therapeutic objectives he had chosen for himself. The common therapeutic vision is the engine driving the learning and transfer processes that feed the growth and development processes our client engages with.

5.6 What can Therapeutic Horseback Riding Practitioners (THRPs) do to Amplify Learning?

The findings of this research show that THRPs can achieve amplification by using three types of strategies. The first strategy has to do with amplifying a skill learned in the arena, by using a positive reinforcement that is highly valued by the client, immediately when the skill is demonstrated successfully. The second type of amplification is the result of reinforcing successes recounted by the child, which are the result of using a skill learned during THR sessions in other environments. A third type of amplification is achieved by making sure that parents and teachers become reinforcing agents and that they significantly reinforce skills learned during THR sessions when these are successfully demonstrated in the home or school environment respectively.

An example of the first type of amplification can be seen already during Hillary's first session when she completed successfully all the tasks that she was instructed to do (Chapter 4.5.1.1, the first lesson). I used a compound reinforcement, both cognitive (verbal) and emotional ('high five'). An example can also be seen in Saul's session when he became aware that he needed to be more relaxed (Research Diary, Feb. 1, 2012) and in Terry's first session after she overcame her fear of riding (Research Diary, May 20th, 2012). de Shazer (1994) and Gurman (2008) found that amplifying client's successes contributed to positive changes in the client's behaviour. The external validity of these findings is high.

The second type of amplification occurred when the client came to the farm with a list of successes showing the use of skills learned during THR sessions. In addition, when the Weekly Parent's Report form indicated that the child successfully used skills learned during the THR session, also at home and or in school.

An example of the second type of amplification can be seen already after the first THR session with Hillary. Hillary came to her second THR session and showed me

her list of successes, reporting that she became more organised (Appendix F.3, Hillary's weekly successes report, p. 295). In addition, Hillary's mother reported on her Weekly Parents Report form that week, that Hillary used the skill of organisation, at home (Appendix F.1, Hillary's Parent's Weekly Report, p. 291). I reinforced Hillary for achieving so much in one week. Saul also succeeded in using skills learned during THR sessions at home and in school. An example to that can be seen in Saul's mother's report (Appendix G.1, pp. 305-307). In addition, Saul reported to me on using these skills at home and in school (Appendix G.3, Saul's Weekly Success List, pp. 308-310). I reinforced Saul's achievements, thus amplifying his successes. Terry also learned to use the skills learned during her THR sessions in her daily life, at home and in school and I reinforced her. Examples of her use of skills can be found in her Parent's Weekly Reports (Appendix H.1, 314-315) where her mother reported that Terry had learned how to relax and her father remarked that Terry had become more caring and had said *"Daddy I love you"* (Appendix H1, p. 315) and on her list of successes where Terry reported that she succeeded in organising her school bag and her room (Appendix H.3, pp. 316-317).

The third type of amplification was achieved by training the members of the strategic alliance, the clients' parents and teachers, how to significantly reinforce skills learned during THR sessions when these were successfully demonstrated in the home or school environment. Parents were trained to adopt the major skills required for learning process facilitation and forgo aversive control methods. Parents and teachers were encouraged to 'spot-light' the THR experiences of the child-client in front of family and friends and in the classroom. Parents told other siblings and family how well the child-client progressed in his horseback riding therapy sessions and asked the child-client to share his list of successes. In school, the home room teacher, asked the student-client to share with his peers the experiences he had during the THR sessions.

In every instance that the THR experiences were highlighted in school the valence of the skills that made up the client's repertoire of behaviour was amplified. Student-clients gained friends who invited them to participate in sleepovers and visits after school (Appendix F.4, Dec. 21h, 2011, p. 299). Parents and teachers who

had renounced aversive control methods were reinforcing new skills learned during THR amplifying them.

5.6.1 The Robustness of the Therapeutic Gains

Yalom has argued that therapeutic gains are considered to be robust when they withstand the test of time in social situations that were not designed to support them (Yalom, 2002). This dissertation presented three cases in which therapeutic gains were shaped and strengthened during 30 THR sessions (a period corresponding to about 34 – 35 weeks) and followed up in the school and in the home. Parents and teachers were asked to adopt and implement two major changes to the learning environments they constructed. The changes were: '*adopt learning principles suited for positive control and renounce aversive control completely'*, and *'learn from success, no matter how small and celebrate it'*. Parents were coached during every session and on the phone when necessary. Teachers were coached twice during the THR programme, at the beginning of the programme and after about 15 sessions.

The robustness of the therapeutic gains was investigated seven to eight months after the end of the THR programme. Conversations with parents and clients indicated that the therapeutic gains were sustained (Appendixes, F.6, pp. 304-305; G.6, p. 314; H.6, p. 321).

Seven months after the THR programme was completed, Hillary indicated that she was still using what she considered to be riding skills at home and in school. For example Hillary reported that she was using a technique used to stopping a horse during an emergency situation, 'emergency stopping', at home and in school to better prevent potential anger outbursts. Hillary reported that when she felt an anger outburst coming on, she hugs herself real close to stop the anger outburst and when at home she goes to her room and hugs herself tightly until the anger passes. "It works for me!" she said. This procedure is very similar to the one used by horseback riders to stop a runaway horse. Hillary was able to transfer skills learned during THR from the first day we started THR and she was still using the skills and strategies she learned during our sessions after seven months (Appendix F.6, p. 304-305).

A follow up discussion was also conducted with Saul's mother, eight months after therapy ended. The mother reported that Saul was able to keep the gains he had realised during THR. She reported that he is calmer and much more cooperative. It is easier for him in school and he has more friends. The mother added that in spite of the changes that Saul made there is still more work that needed to be done with him, but she said that she feels that they were on the right path (Appendix G.6, p. 314).

A follow up discussion was conducted with Terry's mother and father eight months after therapy ended. Both parents indicated that Terry made a big improvement in her relationship with them. According to them Terry listens to them, was calmer and played nicely with her siblings (Appendix H.6, p. 321).

During the THR programme I became aware that there had been lapses in the re-engineering of the learning environments in the homes of two of the clients (Hillary and Saul) and these lapses resulted in short periods of regression on the therapeutic gains charts. However, after correction, the therapeutic gains regained their strength demonstrating their robustness even after the THR programme had been over for seven to eight months.

5.6.2 The External Validity of the Study's Findings

The KTR Model evolved from the data collected during two years of observations on several farms that had THR programmes, a pilot study in which THRPs and parents of children engaged in THR programmes participated, a comprehensive search of the research literature relevant to therapeutic horseback riding and equine assisted therapy and the research literature relevant to ADHD and it's treatment.
Once constructed, the KTR Model served as the basis for the THR Manual. THR experts, who provided professional feedback, evaluated the Manual. This feedback was fully incorporated into the THR Manual thus widening the therapeutic base upon which the KTR Model and the THR Manual were founded. In the process, both the model and the manual were rigorously grounded in the cumulative experience derived from the treatment of children challenged by ADHD by these experts and by me.

Once the THR Manual was complete it was tried in the field and the data collected showed that children diagnosed with ADHD who engaged with the programme delivered according to the KTR Model made significant therapeutic gains, which were sustainable over time.

The internal validity of the research findings was evaluated by triangulating data from various research tools within each case study and by triangulating the findings between the three cases studied. The internal validity was found to be very high.

The external validity of the research findings was evaluated by triangulating the study's findings with findings reported by other researchers in Israel and overseas, working in different cultures and with different participants and using various methods in their studies. The external validity of the findings was further enhanced by using expert THR practitioners in stages 3 and 6 to validate the findings. The external validity of the findings was high and permitted the drawing of conclusions and the drafting of recommendations for a wide audience of practitioners.

Hacohen and Zimran (1999) have argued that action research evolves from the researcher's perceptions of the principles of his practice but that the interpretations given the processes and phenomena investigated in the field of research will depend on the situation, or social and cultural context in which they develop. The challenge facing practitioners investigating their own practice is the need to maintain objectivity and rigour while searching for the truth among the contributions made by participant voices (of which the practitioner's voice is one).

In order to further test the external validity of the findings, during the last stage of the research, equine assisted therapy experts, practicing in Israel and overseas, were asked to comment on the study's findings and conclusions and base their opinions on examples drawn from their praxis. The three experts that were chosen have trained between them hundreds of THRPs and treated thousands of clients diagnosed with ADHD. The data collected from them indicates that the external validity of the findings of this study was very strong (4.62 – 'I fully agree') and warrants generalisation of the findings to the wider population (Table 25, p. 172).

During the validation process further research questions emerged. For example, I intend to test the applicability of the KTR Model to the treatment of children diagnosed with ADHD belonging to additional age groups and to adults; to the treatment of children belonging to the PDD autism spectrum; or to the treatment of children and adults diagnosed with PTSD

5.7 Study Limitation

In Stage 4 of this study, data was collected from three cases. The participants were Israeli students aged 9-12 their parents and teachers, living in the northern part of Israel. The study lasted for one year. This is a small sample and limited to a certain population. In Stage 6 I used THR experts to validate the study's findings. These experts had accumulated THR experience working on a variety of THR programmes on various farms in Israel and overseas. By using them I was able to show that the KTR Model of THR is applicable to a larger population than the one sampled by me (Maxwell, 1995, 2005).

Another limitation of the research was the ability to generalise from the results of a multiple case study. My confidence in the effects observed was enhanced by the fact that all three case studies reported similar if not identical results. It was possible to estimate the internal validity of my finding using within case and between cases triangulation techniques. The external validity of my findings was estimated by constantly triangulating the study's findings with the findings of other studies during the discussion of the findings. The external validity of the findings was further boosted by the use of experts to evaluate the findings and the conclusions drawn from these findings. The internal and external validity of the findings were consistently high (McLoed, 2011; Yin, 2009).

Yin (2003, pp 31–33) argues that when using the case study design, researchers need to consider analytical generalisation and not statistical generalisation. This type of generalisation applies the research findings to the broader theory of THR that generated the KTR Model.

An additional limitation of the research was that participation in the research was voluntary and limited to one day a week for thirty weekly sessions. No data was available from potential participants who chose not to participate in the study or that

could not participate on the chosen day. Since the study investigated the development and growth processes elicited and supported by THR and studied the application of the KTR model, the data collected was adequate for these purposes, and experts validated the findings.

5.8 Summary

This chapter presented a critical discussion of the findings focused on answers to the five research questions. The first two questions dealt with the pilot research conducted in four different therapeutic horseback riding schools. The findings from the pilot research showed that the children came to the farm to learn how to ride and did not regard the riding session as therapy. Most parents reported no change in their child's behaviour as a result of the riding sessions. Transfer of skills learned on the farm during THR sessions did not occur. THRPs did not demonstrate an understanding of therapeutic objectives and were not aware of the importance of the transfer of skills clients acquired during THR sessions to other environments. THRPs worked on teaching horseback riding.

The findings of the pilot study were the basis for the development of the Knowing Therapeutic Riding (KTR) model, which was applied in the therapy conducted with three children diagnosed having ADHD. The findings showed that when the THR was conducted according to the KTR model the skills and strategies learned during THR, were transferred to other learning environments and contributed to the client's ability to reach more effectively their therapeutic objectives. Working according to the KTR model required the creation of a therapeutic vision, defining therapeutic objectives, creating therapeutic alliances, reinforcing successes and required learning from successes. The KTR model also required that the THRPs facilitate transfer, follow-up on progress made toward, achieving therapeutic objectives and amplifying achievements. THR practitioner, parents, child and teachers should be fully aware of the most important feature of THR, that **it is therapy and not a recreational activity.**

Chapter 6

Summary

and Conclusions

6.1 Introduction

This study investigated the outcomes and practice of Therapeutic Horseback Riding (THR) for children diagnosed having Attention Deficit with Hyperactivity Disorder (ADHD). The therapeutic horseback riding was conducted according to the Knowing Therapeutic Riding (KTR) model. I developed this model after combining my practice, two years of observing THR and the analysis of the results of a pilot study conducted in four different therapeutic horseback riding schools in Israel.

6.2 The Research Objectives (Chapter 1.1):

The study was designed to meet the following research objectives:

* To understand what process or processes developed during the interaction between child and THRP within the framework of THR that brought about a change in the child;
* To build a therapeutic bridge that would facilitate the transfer of the learning outcomes and strategies learned during THR, in the riding arena, into the family environment, and into the classroom;
* To find out what I can do to leverage learning gains achieved in the riding arena, amplify them and harness them to the self actualisation process driving the young learner;
* To improve the quality of life of children challenged with ADHD;
* To make a difference in the world of Equine Assisted Therapy, by publishing my new manual.
* To start a dialogue with professionals in the field of Equine Assisted Therapy in Israel and around the world;

The first objective my research set out to achieve was to understand what process or processes developed during the interaction between child and THRP, within the framework of THR that brought about a change in the child. This objective was met by showing that when the Therapeutic Horseback Riding Practitioner (THRP) created an alliance between himself, the client, the parents and the teachers, sustainable positive changes occurred. Once the alliance was created the THRP intervened in the home environment and in the school environment by training both parents and teachers to use positive control techniques exclusively and to focus on

the child's successes and their celebration. The THRP facilitated the creation of a common therapeutic vision that served as the engine of change. As part of the creation of the common therapeutic vision, therapeutic objectives were defined and served as milestones during the therapy. As therapeutic objective were achieved, learning from successes was encouraged. Follow-up of progress in achieving therapeutic objectives was shown to be effective in reframing the child's experience at home and in school. The child diagnosed having ADHD who was used to experience negative attitudes directed at him, now collected successes at home and in school and made friends.

In all three cases that were treated by me in accordance with the KTR model of therapeutic horseback riding, the children went through a process of positive change in their behaviour, in the way they perceived themselves and in their social and academic achievements.

The second objective was to build a therapeutic bridge that would facilitate the transfer of the learning outcomes and strategies learned during THR, in the riding arena, into the family environment, and into the classroom. This objective was achieved by teaching the child to reflect on the newly acquired skills in the riding arena and discover the relevancy of these skills to his home and school experiences. Once the relevancy was understood, later reports of successes in the home and school environment evidenced the successful transfer of these skills. Once the reflection was facilitated and the child discovered the relevancy of these skills to the outside world, a therapeutic bridge was created between the two worlds, the world of the farm and the outside world, the home and school environments. These findings support the previous findings by Green (2003), Lambert (1992) and Yalom (2002) and their theoretical formulations, who considered the transfer of skills learned in therapeutic setting to the world outside, as a measure of therapeutic effectiveness.

By contrasting the findings of the pilot study with those of the main study, I found that when transfer is facilitated it takes place and contributes to achieving therapeutic objective. On the other hand when transfer is not facilitated it rarely takes place. These findings were supported by Salomon and Perkins (1987), Salomon and Perkins (1989) and Salomon, Perkins and Globerson (1991) who

stressed the notion of facilitating transfer, because transfer does not take place spontaneously.

The third objective was to find out what I can do to leverage learning gains achieved in the riding arena, amplify them and harness them to the self actualisation process driving the young learner. This objective was achieved by amplifying successes and by celebrating them in the arena, at home and at school when they occurred and by reviewing them as they were summarised on the list of success the client brought to THR a week later.

My research was developed based on the Humanistic Therapeutic Philosophy (Rogers, 1980; Rotter, 1954) that believes that the major driving force behind human development is the individual need for self-actualisation. The encounter of the child challenged by ADHD with life experiences at home and in school often resulted in the creation of man made obstacles in the child's developmental path. These obstacles often delayed the child's process of self-actualisation and at times caused children diagnosed with ADHD to develop deficiencies or abandon the path altogether. Specifically the child's self-esteem and efficacy were lowered. Social achievement was impaired as were academic achievements. Evidence for these processes were found in all three cases studied. The THR intervention according to the Knowing Therapeutic Riding (KTR) model used in this research showed that the KTR model of THR is an effective way to put the child back on the path of self-actualisation. In Hillary's case during the Intake, Hillary complained of difficulties in making friends, difficulties in school, low achievement and low self-esteem. At the end of therapy Hillary reported having made new friends, having improved her academic achievement and scored higher on the self-esteem questionnaire.

In Saul's case similar results were observed. During Intake Saul reported that he had difficulties keeping friends, had disciplinary problems, average to good academic results and an average to good self-esteem. At the end of THR Saul reported having a good friend, improving his academic achievements and scored higher on a self-esteem questionnaire.

In Terry's case there was difficulty in showing emotions in interpersonal relationships, a low to medium perception of her own academic achievements and medium self-esteem. At the end of THR, Terry reported improvement in all categories.

The fourth objective was to improve the quality of life of children challenged with ADHD. All three children at the end of therapy using the KTR model reported improving their quality of life, having made gains towards the fulfilment of their common therapeutic vision. Hillary's parents reported, in a letter summarising the therapeutic process (Appendix F.5, pp. 303-304) that Hillary has made great strides towards fulfilling her therapeutic vision. Hillary reported that she had made friends and succeeded to keep them. In fact Hillary who had not received invitations to participate in sleepovers at the houses of classmates (before starting THR), now had to learn how to manage her time so as to accommodate all the invitations she received. Also Saul's parents reported that Saul had made a significant change for the better in his behaviour, having no anger outbursts, being calmer and more in focus, thus improving the quality of his life (Saul's parents' letter, Appendix G.5, p. 313). Terry's parents reported that Terry had learned to be patient and saw a significant improvement in her development. Terry became more independent and started to take responsibility for her actions and responsibilities at home. Terry also became more affectionate towards her parents (Appendix H.1, Parent's Weekly Report, July 10th, 2012, p. 315).

In their letter to me, Terry's parents mentioned 'improvement in Terry's ability to listen' twice. Looking back at the Intake interview, the ability to listen was seen by both Terry and her parents, as being a major therapeutic objective to be achieved. The fact that the achievement of this therapeutic goal was mentioned twice goes to show the magnitude of the impact the achievement of this therapeutic goal had on the quality of life of Terry's family. During my last interview with Terry and her mother, both said that the quality of their life as a family and individually had improved.

The fifth objective was to make a difference in the world of Equine Assisted Therapy, by publishing my new Manual. A manual presenting the KTR model was

created following the pilot research, which was the first stage of this thesis. This manual instructs Therapeutic Horseback Riding Practitioners (THRPs) on how to conduct effective THR sessions.

The manual informs learning partnerships between school, therapist and family. The manual supports processes that facilitate and serve to amplify the results of the therapeutic-learning process and produce higher quality learning outcomes in all three environments. Such a partnership helped its stakeholders not only to reap the benefits of therapeutic riding but also to learn how to support THR at the family and classroom levels, and thus contribute to THR effectiveness.

The sixth objective of the thesis was to start a dialogue with professionals in the field of Equine Assisted Therapy in Israel and around the world. This objective was met by the dissemination of my research through publication, presentation at academic and professional conventions and at seminars and workshops. More about the dissemination of my thesis can be found in the next sub-chapter.

The thesis met successfully all of its research objectives. It has done so by contributing a much-needed insight into the world of THR and by proposing an effective therapeutic intervention for children challenged by ADHD. The thesis also contributes to the professional development of therapeutic horseback riding practitioners.

6.3 Dissemination

One of the reasons I invested in the production of new research-based knowledge in the field of THR and in the dissemination of this knowledge was to facilitate its utilisation in my own as well as in the practice of my professional peers and thus bring about change. Specifically, one of my primary goals was to improve the quality of life of those for whom and with whom I work and facilitate the development and growth of my clients. One of the leading goals of dissemination is utilisation (Granger and White, 2001; Katz, 1995). As I will show in the following pages I have met these dissemination goals completely and my strategy led to the wide utilisation of my findings.

I know that disseminating my findings led to the improvement of the quality of life of children diagnosed having ADHD who have turned to THR in order to improve the quality of their lives. From working with these children, I know how hard their lives can be. Since I made a difference for the better in the quality of their lives, I feel very satisfied and self fulfilled.

The academic and professional literature on dissemination taught me that there were mainly two reasons to why it was important for me to disseminate my research. The first reason focused on the personal and professional benefits I would derive from publishing my findings. The second reason for disseminating my paper focused on the benefits to those who are in my field of practice who could benefit from the new knowledge I created by research (Ritchie, 2003). When I look at the benefits derived from dissemination I see quite a few. Firstly and the most important of the personal benefits, is the personal sense of achievement I derived from seeing my ideas in print and from presenting them before my peers. The proceedings of a peer reviewed international conference on THR practice that accepted my paper (Kreindler and Kreindler, 2012) signaled that my work is worthy of wider circulation and that others, in my profession and in the academic circle I belong to have agreed that I had met the rigors and standards of my profession. Secondly, since publishing demands that I develop writing and communication skills, which are valuable in a variety of settings, at work or in the halls of academia where I lecture, I developed in that direction as well. Having an article accepted for presentation and for publication signaled to me that I have met that target as well. Thirdly, publication always compliments the Curriculum Vitae quite nicely, and a strong CV was very important for the advancement of my academic and research career. Fourthly, I became more visible within appropriate professional and academic circles thus enabling the professional and academic dialogues about my findings and about the research of others and contributing to my personal and professional development (Rowley and Slack, 2000).

When I focus on the benefits others derived from the publishing of my research I examined these through the criteria developed by Harmsworth and Turpin (2000). Harmsworth and Turpin argued that there are three main reasons why one should publish:

The first is - Dissemination for Awareness, the wish that other people will become aware of the findings of the research. These people are in the category of those that do not require a detailed knowledge of the work, but it is helpful for them to be aware of the research outcomes. The people belonging to this category will spread the research outcomes by "word of mouth". They could be parents of children diagnosed with ADHD looking for effective therapy programmes; they could be family doctors that provide general advice to parents and children, and providers of social services. For "Awareness" - I gave presentations at conferences, while I was still working on my research. I presented my research question and the methodology and received feed back from professionals in my field. I started working on my first set of presentations, in front of groups of THRPs in different parts of the country. Increasing awareness about my project put me in touch with practitioners and families and provided me with much needed feedback.

The second aim for dissemination according to Harmsworth and Turpin (2000) is – Dissemination for Knowledge. This type of dissemination will reach a group of people that the researcher believes can directly benefit from what the research outcomes have to offer. In this group I would include Neurologists, teachers, and THR practitioners. While I was conducting my research, other researchers became interested in this line of research and I helped.

The third aim for disseminating according to Harmsworth and Turpin (2000) is - Dissemination for Action. Action refers to a change of practice resulting from the adoption of products, materials, or approaches derived from the research outcomes. In this group I would include Major Medical Insurers, The Ministry of Sport that formulates policy regarding THR, and Colleges that train THR practitioners. In fact, there are already a few therapeutic horseback riding schools in Israel that are using my Manual in their teaching, and I have offered my Manual to the Ministry of Sport so that it may be adopted as the official training Manual for THR certification in Israel.

My main focus during the dissemination process was to disseminate my project for Action. I wanted to make a difference in THR. I already made a difference in the lives of the three children who participated in my research and in the lives of those I continue to treat using the KTR Model of THR. I want to continue to bring about a

real and significant improvement in the lives of people, especially in the lives of the children challenged by ADHD, their parents and all the others who work with them and try to help them. I believe that there is no sense of keeping the new knowledge that I have gained to myself. Keeping knowledge gained through research to oneself is like not gaining it at all. I like Wilson's critical evaluation of academic and professional dissemination practice when he said, "Publish or Perish v Publish and be Praised!" (Wilson, Richardson and Sowden, 2002). I would like to add: "**Publish and make a difference**." I do not feel the pressure of an academic career requiring publication and I am not looking for praise. I do feel a burning desire to make a difference in the 'Quality and Effectiveness of Treatment' and the subsequent development of children challenged by ADHD, who engaged with THR programmes using the KTR Model of THR. Or as Albert (2002) put it:

> *The research's task is not complete unless the findings are related to political, economic and social aspects of society and placed into the public domain in order to further educational improvement. Getting published is deemed to be the basic currency of academic life* (Albert, 2002).

Also Brodie (2005) stated that:

> *Academic publishing is an important part of the process of scholarly communication and of the validation and distribution of academic knowledge* (Brodie, 2005 p.1).

As such, dissemination served three main roles: validation of my work, the communication of my ideas and "the archiving of this work for future access by others" (Brodie, 2005 p.2). Brodie (2005) and Viothofer (2005) put a special emphasis on E-Scholarship, publishing via the Internet. I was particularly influenced by Voithofer (2005) who claimed that:

> *As academic publishing in education gradually changes from a print culture to a digital new media culture, it is important to continue to theorize, study, and historicize emerging relationships between the media and academic inquiry, in order to ensure the ability of education research to respond to changing social, pedagogical, technological, learning and cultural contexts* (Viothofer, 2005, p. 3).

In order to satisfy Viothofer's (2005) point I published the article I wrote on the Internet (www.daliakreindler.co.il).

While in the past, one regarded the library, as the main source for getting information on pervious work and writings published by other researchers, today, there is an enormous amount of information that is readily accessible through the web. I receive information and also send information to several hundred people all over the world. There are many different avenues for dissemination, and there are advantages and limitations to each one of them.

6.3.1 Conclusion

Writing this chapter sharpened the importance of dissemination for me. I realised that dissemination of a paper is a process which, in order to achieve it, I need to take careful steps and answer for myself certain questions before disseminating.

I need to know: what to disseminate? to whom I am disseminating, when to disseminate, what are the most effective ways of disseminating? Who might help me disseminate? How do I prepare my strategy? How do I turn my strategy into an action plan? How do I cost my dissemination activities? And how do I know, I have been successful? (Harmsworth and Turpin, 2000). I have tried to answer these questions. Now I know that I have started the process of dissemination, by writing the paper that reported my findings from this research, by contacting journals that might accept my work for publication and already invited me to send them an article, and by thinking about dissemination day and night.

I will know if I have been successful when therapeutic and educational practices will change in response to the dissemination of my manual.

This chapter set in motion processes that helped redefine my horizons both professionally and personally.

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APPENDIX 00A:

Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder – (DSM – IV, 1994)

A. Either (1) or (2):

(1) ***inattention****:* six (or more) of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with the child's developmental level:
(a) often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities
(b) often has difficulty sustaining attention levels required of him during tasks or play activities.
(c) often does not seem to listen when spoken to directly
(d) often does not follow through on instructions and fails to finish school work, chores, or duties in the workplace (not due to oppositional behaviour or failure to understand instructions)
(e) often has difficulty organising tasks and activities
(f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
(g) often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
(h) is often easily distracted by extraneous stimuli
(i) is often forgetful during daily activities

(2) ***Hyperactivity-impulsivity:*** six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with the student's developmental level:

Hyperactivity:

(a) often fidgets with hands or feet or squirms in seat
(b) often leaves seat in classroom or in other situations in which remaining seated is expected

(c) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
(d) often has difficulty playing or engaging in leisure activities quietly
(e) is often "on the go" or often acts as if "driven by a motor"
(f) often talks excessively

Impulsivity
(g) often blurts out answers before questions have been completed
(h) often has difficulty awaiting his turn
(i) often interrupts or intrudes on others (e.g., butts into conversations or games)

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms listed is present in two or more settings (e.g., at school [or work] and at home).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorders, or a Personality Disorder).

PILOT'S APPENDIXES:

APPENDIX A: Interviews with parents of children diagnosed with ADHD:

Parents responses to the question: Can you tell me about your child who was enrolled in THR, and do you see any significant change in your child behaviour as a result of the therapeutic horseback riding?

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1. Gilli's mother (9 1/2 year old boy*): "We came here because the doctor (Neurologist) recommended it for our child. You see he has a lot of difficulties and we are all in it with him, the whole family. It is not easy with him, to say the least.* ***He does not listen*** *to what we tell him, his room is a mess, he cannot do his homework alone and when I sit with him it is horrible, we always fight and then I give up and let him go. He* ***gets angry very easily****. There are times that I just don't know what to do. Many times. It can be on little things or big things, like going to sleep is a whole production with him. It is just not easy. When he comes from school he is very frustrated, I can see it on him. If I ask him how was it in school, he gets angry with me. It is very hard for him in school. He has no friends, and the teachers usually get very angry with him. Lots of the time they send him out of the class because they cannot handle him. He makes noises and disturbs the lesson. I know that my son* ***loves to ride****, he is waiting for the riding lessons the whole week. He is a different child here than at home. I see how* ***he listens*** *to the riding instructor and tries very hard to do what he tells him. He is* ***organised here and in control.*** *You have to see how he controls the horse, it is amazing. As I told you, at home he does not listen to me or to his father. Gilli is not an easy child because of his ADHD. He is* ***very angry most of the time,*** *gets into trouble with his brothers. Also at school he* ***gets into lots of troubles****, because he* ***does not listen to the teacher*** *and it is very hard for him to sit in the class for more than ten minutes. I don't understand, here he is on the horse for thirty minutes and does not complain and I know that if the lessons were even longer he would have no problem. Why can't he be like that also at home and at school? To be honest* ***I don't see any changes at home or in school*** *and he is riding here for six months, but I am happy that he is happy here, so we keep coming. Who knows maybe it will help after all. They told us that horseback riding does help children like Gilli with ADHD."*

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2. David's father (10 year old boy): Well, David is not an easy child because of his ADHD. He ***is very angry most of the time****,* ***gets into trouble*** *with his brothers and* ***at school*** *with the teachers and his classmates. We are called to school a few times during the week, always because he got in trouble some how with someone or with one of the teachers. We really don't know what to do with him.* ***I don't see changes****, but I am so happy that* ***my son loves to ride*** *and he is having a great time here. It is so hard for him because of his ADHD, in school and also at home when he has to do homework and other things. I am glad that this is one place that he just enjoys, and he is happy. He is looking forward to come here.* ***He is different here; he is calmer, cooperative and happy.*** *I sometime tell him that if he misbehaves I will punish him and will not bring him her. I know it is not right that I say that to him, but sometimes this helps. He promises to behave himself, but it does not last for a long time, maybe a day or two."*

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3. Asaf's mother (an10 year old boy*): "Asaf is a lovely child, but when* ***he gets into a bad mood*** *he is horrible and there is nothing we can do to calm him down. Yesterday he had a fight with his younger brother, I thought he was going to kill him. I had to yell and hold him so strongly that I was afraid I was going to break his arm. But you see I had no choice, he just would not stop. That happens quite often. Also* ***at school he fights with his classmates and is asked by the teacher to get out of the class quite often****. They told us that horseback riding would do something to him. We really hoped that it will, but unfortunately* ***I don't see changes****. Maybe there are. I cannot say what they are exactly, but he is happier, but mostly here, around the horses. Yes, I think that he is happier, especially when we come here.* ***He loves to ride*** *and he loves the horses, he tells me that the horses here are his friends, you know, he does not have any friends, it is very hard for him to make friends, because he is so impulsive.* ***Here he is much calmer*** *and I see how he treats the horses, he hugs them and even kisses them. I don't get kisses from him, very rarely that he kisses me. When we come here* ***he talks to me more, and he is like a different child.*** *I wish he would be like that also at home and in school. Happier, calmer and talkative, but he is not, only here around the horses."*

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4. Danna's mother (an 11 year old girl*): "We always knew that Danna was different from our other children. We have two older daughters and a younger boy. She is* ***very active and restless*** *and also* ***gets angry very easily*** *over little things. We had her checked only this year and we were told that she has ADHD. We did not know what that meant but when we heard the symptoms they matched with her behaviour,* ***restlessness, anger outbursts, difficulties in organising things like homework or organising her room.*** *She* ***does not listen*** *to what we tell her to do or not to do. She rarely listens to what the teachers tell her to do and she refuses to do homework. She hardly has any friends. It is not easy with her but now that we know her situation we try to be more patience with her. It does not work all the time. Here on the farm it is* ***like having a different child. She is calm*** *around the horses, she* ***does what the instructor tells her to do*** *and she very seldom gets angry or frustrated. It is a pleasure looking at her while she rides. She is so happy here and I am happy for her. But once she is back home, or at school* ***she goes back to her usual behaviour.***

I wish she could be like that at home but that is not the case even though she has been riding here for quite a while.

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5. Edo's mother (10 year old boy*): "Edo is our older child; we have two more younger children. He was diagnosed having ADHD three years ago. When our second child was born I realised that Edo is different. He is so* ***restless and moody.*** *He can switch from being O.K. to* ***being angry*** *in a second and I don't understand why.* ***At school he gets into fights with other children almost daily****. We have tried all kinds of activities for him like swimming and Karate, but we did not see much of an improvement. It did help a bit with his self-esteem. He felt better about himself, especially with the Karate, but this year he refused to go, he does not want to say why, and it was a surprise for me because I thought that he liked it. Maybe something happened there, we don't know and we cannot force him to go to Karate if he refuses. We were recommended to bring him to horseback riding. The doctor said that it helps children with ADHD. We* ***don't see much of a change*** *except the fact that we see that he loves to come here and be around the horses.* ***He likes to ride****. He is* ***calmer and more relaxed*** *than when he is not with the horse. At home*

and at school it is the same. Maybe we need more time, even though he has been riding for seven months by now."

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6. Yaron's mother (a 10 years old boy*): "Yaron is a good boy. He is a challenge for us, you see. He was born after many years in which we could not have children. He is my whole world. He is our only child. I know that it is not easy for him having ADHD. His father is the same, even though at those times they did not use to diagnose children. But I know he is also an ADHD. He gets frustrated and angry very easily. Yaron gets frustrated and angry very easily. It is hard for him to get organised and do his homework. I have to sit with him and it is not easy.*
At school he is O.K., but he is lonely. He does not have any friends, but here in the farm it is a different story. Yaron is ***eager to come to the farm.*** *He is happy here, simple as that.* ***He listens to the instructor*** *and feels good with the riding. He tells me that when he rides he feels that he is on top of the world. I loved hearing it."*

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7. Ronen's father (11 years old)*:" Ronen is our oldest boy. Since he was born he is very active, he cannot sit quite for a moment and gets angry very quickly. I thought that all boys are like that, but when he started school they asked us to have him diagnosed. It turned out that he is an ADHD. That explained his behaviour. Actually, I was like him and still needs to be active all the time. Since we started the riding lessons,* ***I see some changes. Ronen loves to come here and his achievements with the riding raised his self-esteem and he is less angry also at home and at school."***

APPENDIX B: Observations
Observation #1

The observation was conducted on a THR lesson with a child 10 years old, diagnosed having ADHD. *The duration of the lesson was 30 minutes.* *The horse is ready at the arena.* *The child arrived with his father.* ***The THRP asked the father to leave the place.*** *The child gets his helmet.*	*The lesson:* *1. The child gets on the horse with the practitioner's help. The practitioner asks the child to go around 3 times, each side in a slow walk, back straight, to hold the reins short and to keep a steady tempo and to sit without moving his body.*	*The practitioner started the lesson without asking the child how he was. The practitioner did not inform the child on the therapeutic objectives. Emphasis was on the riding, holding the hands right and sitting position.*	
	2. The practitioner asks the child to move faster. The child kicks the horse hard and pulls on the reins. The practitioner asks the child to be softer and not to pull so hard.		

APPENDIX C
Observation #2

THRP - S

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	V	V	30
Focused	-	V	-	10
Organised	V	-	V	20
Concentration	V	-	V	20
Child is happy (smiles)	-	V	-	10
Positive interaction	- Screamed	- Screamed	V	10

Observation #3

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	-	V	20
Focused	-	-	V	10
Organised	-	-	-	0
Concentration	-	-	V	10
Child is happy (smiles)	V	-	-	10
Positive interaction	-	-	-	10

Observation #4

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	-	V	20
Focused	-	-	V	10
Organised	-	-	-	0
Concentration	-	-	V	10
Child is happy (smiles)	V	-	-	10
Positive interaction	-	-	-	0

Observation #5

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	-	-	V	10
Focused	-	V	V	20
Organised	V	-	V	20
Concentration	-	V	-	10
Child is happy (smiles)	-	-	-	0
Positive interaction	V	-	V	20

Observation #6

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	V	V	30
Focused	-	-	V	10
Organised	-	-	V	10
Concentration	-	V	-	10
Child is happy (smiles)	-	-	-	0
Positive interaction	V	-	-	10

Observation #7

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	-	V	20
Focused	-	-	V	10
Organised	V	-	V	20
Concentration	V	-	-	10
Child is happy (smiles)	-	-	-	0
Positive interaction	V	-	-	10

Observation #8

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	-	-	V	10
Focused	-	-	V	10
Organised	-	-	V	10
Concentration	-	V	-	10
Child is happy (smiles)	-	-	-	0
Positive interaction	-	-	V	10

Observation #9

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	-	V	20
Focused	-	V	V	20
Organised	-	-	V	10
Concentration	V	V	-	20
Child is happy (smiles)	-	-	-	0
Positive interaction	-	-	V	10

Observation #10

	Minute 7	Minute 15	Minute 25	
Calm	V	V	V	30
Follows instructions	V	V	V	30
Focused	V	V	V	30
Organised	-	V	V	20
Concentration	V	-	V	20
Child is happy (smiles)	-	-	-	0
Positive interaction	-	-	V	10

Summary Tables OBS

Calm	300/300	100%
Follows instructions	210/300	70%
Focused	160/300	53%
Organised	140/300	47%
Concentration	150/300	50%
Child is happy	50/300	17%
Positive interaction	120/300	40%

APPENDIX D: Interviews with THRPs:

The Questions asked:

Q1. What are the aims of Therapeutic Horse Back Riding in your opinion?

Q2. How do you achieve these aims?

Q3. How do you see the role of the horse in the therapeutic process?

Q4. How is a therapeutic riding lesson different, if it is different, from a sport-riding lesson?

Q.5. How is a lesson with a child who was diagnosed with ADHD Different, if it is different, from a child with a different diagnosis?

Q.6 In your opinion, what do you think should be done in addition to what exists in the field of THR?

Q7. Is there anything else you would like to tell me that relate to your experiences as a THR instructor?

Q8. Describe a lesson.

Questions and Answers	Reflection	Induction
Interview with Sam, male, 32 years old: Q1.What are the aims of Therapeutic Horse Back Riding in your opinion? A: **The goal of THR is to empower the rider. This is the aim of THR. This is the essence.** That is the difference between THR and regular riding lessons. Q*: What do you mean by "empower the rider?" I want him to feel good about himself, that he is able to do things.	It reminds me of my own experience as a child, when my father put me on the horse. I felt so strong, so powerful that later I told my friends about my experience.	THR contributes to the empowerment of the rider during the lessons.
Q2. How do you achieve these aims? A: **By teaching the rider riding skills.**	It reminds me of the philosophy lessons I took at the University. The principles of	Skills learned in one environment, not necessarily transfer and

	Philosophy I was asked to learn and regurgitate on exams were not applicable in my real life as a student and part time secretary. Only later in life, after I had decided not to study philosophy at the MA level, was I able to make use of some of the thinking skills I learned in those courses.	become relevant in different environment. Transfer of skills between learning environments is not spontaneous and must be facilitated.
Q3. How do you see the role of the horse in the therapeutic process? A: **The horse is the main tool of the therapist, an excellent mirror.** Reflects the inner problems of the rider. The THR instructor has to see those situations and to use them.	It reminds me of my own horse, how he can feel my mood and act upon it.	Horses are sensitive to the rider and their behaviour reflects the rider's. A good instructor can gain insights about his client through the horses actions.
Q4. How is a therapeutic riding lesson different, if it is different, from a sport- riding lesson? A: What should be and what is happening are two different things. What should be in a regular riding lesson is that the focus should be on the riding skills, an emphasis on achievement, on the performance of the horse, and not to deal with the rider's emotions and how he got up in the morning, but most of the riding instructors that I know are therapeutic riding instructors and they are sensitive to their students' feelings. In fact the session will not be effective if you ignore your student's feelings, also when the session is just a riding lesson. Most of the students gain knowledge for life, without knowing it. In THR, we talk more, we give more attention to the rider, and we give more freedom to the rider to choose what he wants to do, in certain situation**s.**	It reminds me when I just started teaching; I wanted my students to know the material I was teaching regardless of what was going on in the class and regardless of the different issues that bothered them. Only later, when I became sensitive to what	A teacher should be sensitive to his students' feelings.

Q*: You are talking about the fact that the student takes gains for life, what do you do in order for him to transfer what he gained, to other environments in his life? A: My role is to point out and to pay attention, and to give some points so the rider can think about, later the child should make the connections. I cannot get into his brain and connect the threads. For instance if he could not perform one of the exercises and he got very angry we talked about it and I asked him what made him upset and if it helps us to get upset and if it contributes anything to the situation, and slowly he understands that anger has no place and it does not help, and that only by repeated the exercise can he help himself. We talk furthermore and I ask him if it happened to him in different situations and what helped him then, in this way. Q5. How is a lesson with a child who was diagnosed with ADHD Different, if it is different, from a child with a different diagnosis? A: Overall there are cases were there will be a difference and there are cases were there won't be a difference. It is very hard for me to say. Each case is different. Maybe there will be the same objectives in both lessons so the lesson will be the same, and if the objectives will be different, then the lessons will be different. With children with ADHD I need to pay attention to impulsivity and mainly to the child being unable to concentrate. I need to know how to make him concentrate and how he should be less sensitive to the environment and be more in the lesson. I also need not to push too much so the child dose not explode.	was going on with my students and related to that, I started teaching deliberately using the emotions they were bringing to class and became aware that my students were more eager to learn.	
Q6. In your opinion, what do you think should be done in addition to what exists in the field of THR? A: The thing that is difficult in most of the horse farms is being able to move from place to place. I am talking about handicaps on wheel chairs, they should be able to go everywhere on the farm, the office, the bathroom, the riding field…we also need better equipment.	I remember a fellow student of mine who studied psychology with me. It was difficult for him to feel empowered during therapeutic skill practices when he had to cope with being frustrated by the	Learning environments must be adapted to the needs of the student for effective learning to take place.

	inaccessibility of classes and facilities. We had to lift him with his wheel-chair to help him to the elevator. It must have been hard to feel empowered in those lessons where dependency was so strongly present.	
Q7. Is there anything else you would like to tell me that relate to your experiences as a THR instructor? A: I have plenty of experiences I can tell you about, one of the successes that I had was with a retarded child who did not walk at all, and after THR he is now walking and even running a bit. Do you succeed with children with ADHD? Not always. It depends on different things, if the parents bring the child every week, which not always the case. Sometimes the child does not connect with the horse, which also happens, not often. Q*: How do you see the parents' role in the process of the therapy. A: For me **all I want from them is that they make sure that the child is here every week. I do the rest with the child and the horse.**		Only if the therapist takes responsibility for his work, can the therapy succeed.
Q8. Describe a lesson: In general every lessons is divided to three parts; warming up, the lessons itself and what I want to teach, and at the end relaxation. Of course there are different lessons as well.		
++++++++++++++++++++++++++++++ Interview with Amos, Male 35 years old. A THR instructor. Q1.What are the aims of Therapeutic Horseback Riding in your opinion? A: It is different with every child. The advantage in THR is that you can adopt it to every child, according to the child's needs. **The aims of THR are to empower the child in what he needs with the help of the horse.**	++++++++++ It reminds me how empowered I felt (and still do) when I started riding as a young	++++++++ Riding a horse makes a child feels empowered.

	child.	
Q2. How do you achieve these aims? **A: Therapy starts with the relationship between the child and me and the child and the horse. It is a triangular relationship. A good interaction between the three is the basis for every therapy** and from there you can take it to every need of the child. If the child needs an assertive instructor, you do it but in a positive way; explaining the process of how therapeutic goals can be achieved. Always use a **positive interaction**. Q*: How do you build this interaction? A: The beginning of a good relationship starts with feeling good. I ask the child how he feels. I watch the body language, his behaviour. I look at the way he sits, his back and does he laugh? I give him a lot of **positive feedback on a good job**, when he succeeds. I conduct a lot of conversations with the child. I listen very carefully to what he has to say, an active listening. With all this there has to be **a lot of respect to the child and to the horse.** Through the work with the horse I explain to the child how the horse feels and I also talk about myself, how I treat the horse, so from the way that I treat the horse the child can learn how to treat it. Q*: How do you know that you have succeeded to build the relationship you are talking about? A: First, the fact that the children come back to more lessons. Second, if the child comes excited to the lessons. Third, that I see that the child is advancing in the riding itself, and fourth, through my conversations with the child, I ask him how he feels with the horse and me. I think that every information that I get is useful, that is my strength; **like what he likes to eat, what is his favorite color, who is his best friend and so on. That shows the child that I care about him.**	It reminds me that as a child I liked the teachers that interacted nicely with me explained things to me, and I was willing to study in their lessons. These teachers knew how to insist on the goals of the lessons and at the same time nurtured successes, positively reinforced students successes and participations.	A teacher should interact positively with his students; reinforce them, seek out their successes and celebrate them with the students.
Q3. How do you see the role of the horse in the therapeutic process? A: The horse has a few roles: First he is a kind of a mirror for the client and for the therapist. You can understand what kind of difficulties the rider has and also what are his strengths; from the way he handles the horse. **The horse is very important. The horse shows us the bes**t way to treat the child. Q*: Can you give me examples? A: Because I am familiar with the horses and I know them, I know where the horse is in general, how it behaves and acts. If I have a horse that usually stays on	It reminds me of myself when I ride. The horse feels how I am and will act according to my mood.	The horse has the ability to feel the rider.

track and with a specific child he will get of track, this will show me the weakness of the child or that the child is not concentrating. This is the advantage of the Intake (the first meeting with the parent about the child). Through the Intake I come to understand who the child is. I look at what the horse shows me and I know where the child is and understand his behaviour. This is a complicated picture, which allows me to understand where the child is.		
Q4. How is a therapeutic riding lesson different, if it is different, from a sport-riding lesson? A: I think that the main difference is in the instructor's attitude. The therapeutic instructor **needs to be sensitive to the child and to know how much and how far you can challenge the child** and to be sensitive to the child's feelings. This you don't have in a sport lesson. The instructor whose aim is to teach riding does not care how the child feels, he needs to teach the child how to ride a horse.		
Q5. How is a lesson with a child who was diagnosed with ADHD different, if it is different, from a child with different diagnoses? A: It is absolutely different! Most of the time the choice of the horse will be different. I need to know if to give the child a more sensitive horse so he can show the child how he behaves, like mirroring. With a therapeutic lesson I give the child more freedom to choose what he wants to do and I intervene less, the horse will do more. If the child is dreaming, the horse will take him to a corner to eat.		
Q6. In your opinion, what do you think that in addition to what exists in the field of THR, what else should be done? In general there is a lack of awareness to how much THR is helpful to people and children alike. Horse farms and instructors need to bring the awareness of THR to the community. They need to be in touch with Psychological services. Instructors also need to have more training and they need someone to consult with because they have very complicated cases.		
Q8. Describe a lesson: I will talk mainly on a lesson for a child with ADHD. First I expect that the child will go and get his helmet from the equipment room. He knows it. Second step is getting close to the horse and on the horse. We talk about our body language and how the horse can 'reads' our body language and how important it is to pay attention to it. We start with warming up. Walking. We check the		

horse. I talk a lot with the rider to connect with him and to laugh. Than I let the rider jog (run) and we work on riding skills 10 minutes trot or jog or canter. The last 5 – 10 minutes I let the child choose between a trip outside the arena or a game like when I hide things in the arena and he has to find them, or other games, like asking the child to teach me riding. The main thing for me is that the interaction between us is positive and that the child enjoys himself while working on his riding skills. ++++++++++++++++++++++++++++++ An interview with Shiri, Female, 27 years old, a THR instructor. Q1.What are the aims of Therapeutic Horse Riding in your opinion? A: The **main thing is to develop the child's self-confidence**. To do it in a different environment than a therapy room. To combine fun with the therapy. To strengthen the child in what needs to be strengthens all this through the connection with the horse and the instructor. My goal is that the children that I work with will want to come, want to be here. **I connect with them**, without this connection and without trust the child will not let me touch him. **I build the relationship with the child, the horse and me. I want the child to connect with the horse.** Q*: You say that you combine fun with therapy, how do you do that? A: **I create a positive environment for the child, a place that the child would like to come to**. I give him a sense of security, I build trust in him. Q*: How do you do that? A: in order to create a positive environment, **I give the child positive reinforcements.** If he is afraid to do something with the horse, I will give him more time and not push him to do it. I will advance the child according to his tempo, and keep in mind the direction that I want to go to. **I talk to the child. I ask the child how he feels, so he knows that I care about him.**	It reminds me of myself how important it was for me to have a good interaction with my teachers. Until today I am in contact with my 8th grade teacher who was so caring and nice to us as her pupils. For me she is a model teacher who interacted in a positive respectful way.	+++++++ A teacher should interact positively with her pupils showing care and respect.
Q2. How do you achieve these aims? I focus according to the problem. I have a goal, which I want to reach, like self-confidence; I will work on the child anxiety. This is a process; I will put small aims on the way to my goal. Q*: How do you do the reinforcement process of the child according to the child's needs?		It is wise to define small aims in order to reach a big goal. The milestones on the way to

A: I plan a programme for the child according to his needs. I define aims. I try to achieve these aims while I build a positive atmosphere, a place that the child would be happy to come to. For example, if the aim is to reinforce the child's self-confidence. The child is afraid of saying how he feels I will encourage him to tell me and to take care of himself. If I give him something hard to do, I will encourage him to tell me that it is hard for him and that he needs help. I will explain to him that asking for help is not a weakness. Regarding building trust, I conduct my lessons on the basis of one on one. One student per lesson. **I do not get the parents involve in the process.** They are left on the side. The child understands that he can trust me. I speak to him about feelings. I know that I have succeeded in building trust when the child shares with me on his own without me asking, events that happened to him and that might bother him. I had a child, first grad, who decided that he stops going to school. The parents took him to therapy and he also met with the school educational consultant and no one figured out why he did not want to go to school. When he came to me for THR, we went out with the horse to the field, we talked, I talked about myself, and then he told me that he experienced sexual abuse by one of his teachers and that was the reason why he did not want to go to school. Q*: You have said that you focus on the problem. How do you identify the child's problem? Is it from what you heard or read about the child or you yourself identify it? How do you know that you have solved his problem? A: I identify the child's problem from both sources; from what I heard from the parent, but also identify things that the parents did not tell me. During the Intake with the parents, without the child, I hear about the child's difficulties, I summarize the Intake and I define my aims, then I break it down to small objectives and decide what I need to do. I see the results on the child. A child that did not speak at the beginning and did not say what he needs, and then starts to become assertive and talks in a firm and loud voice and shares with me his experiences, I know that there was a change in him. This is what I want.		achieving therapeutic goals need to be clearly defined by therapist and client.
3. How do you see the role of the horse in the therapeutic process? I see the horse as an animal and not as a tool. The horse has its own needs and wants. I need to make sure that the horse will pay attention to me and will want to work not out of fear. I need him to be relaxed and nice. I teach my pupils to love the horse and care for him. The child	It reminds me of my feelings as a child when I cared for my dog and how I	When someone cares for an animal it creates a bond between them.

connects to the horse through his feelings when he takes care of the horse. Q*: You said that there is a need to consider the horse, to care for him and to love him, so he can be relaxed and nice. How do you achieve this? How do you teach the child to love and care for the horse? How do you know that you have succeeded? A: From the first lesson I build the relationship with the child, the horse and with me. **I want the child with connect to the horse.** I do it by touch; ask the child to touch the horse, stroke the horse. I tell the child stories about that particular horse. If I know that the child has some difficulties I will reflect it on the horse; will tell him that the horse also has difficulties in concentrating, for instance. We have a mare named Bracha, which was injured on her forehead and has a bump. If I have a child whom I know that was beaten in school, I will tell him that Bracha was beaten by someone and I have asked the child what he thought that the horse felt. The child will talk about the horse, but actually he talks about himself and reflects his feelings on the horse. When the child asks about a certain horse he was riding on, and cares for that horse, I call it success.	connected to it.	
Q4. How is a therapeutic riding lesson different, if it is different, from a sport-riding lesson? A: In THR my aim is to take care of the problem that the child has and not that he is going to become an outstanding rider. Unlike a regular child where I will bring him to a very high level of riding and that he will be able to compete and become a professional rider.		
Q5. How is a lesson with a child who is diagnosed with ADHD different, if it is different, from a child with a different diagnosis? A: With every client it is completely different, even if they have the same diagnosis. For every child I build a specific programme. The style of the lesson will be different. With a child with ADHD I will give him tasks that will demand of him to concentrate. With a child with CP I will work more on his body movement. Q*: can you give me examples regarding to how is a lesson with a child diagnosed with ADHD different? A: I have a child with ADHD who is using his difficulties to be aggressive and skip school. I also have a child with ADHD who is ashamed of his difficulties and is very closed. With each one of them, I will work differently; with the closed child I will work more on reinforcing his self-confidence, I will make sure he feels comfortable with me and the horse and that he understood that he has a problem, but that does not make him less than others. I will choose an easy horse		

for him to handle. With the aggressive child I will work on reducing his aggression by choosing a horse that will challenge him and will be hard for him to handle.		
Q6. In your opinion what do you think that in addition to what exist in the field of THR, should be done? It is very important for me that a lesson should be 45 minutes and not 30 minutes, as it is today, but I know that it will not change. In 45 minutes I will have time to talk to the child before the lesson and also to his parents.		
7. Is there anything else that you would like to tell me about your experience as a THR instructor? In general, we covered everything. We did not talk about adults and riding.		
8. Describe a THR lesson: First, I go to the child and that is when the lesson starts. I start with warming up on the horse. Exercises and tasks. At the last 5 minutes we play.		
++++++++++++++++++++++++++++++++++++ An Interview with Shila, Female, 26 years old. 1. What are the aims of Therapeutic Horse Riding in your opinion? **The main aim is to lift the child's confidence, to empower him, to have fun and pleasure**, a place where the child can express himself and is not being judged, but gets a positive feedback from the horse. The horse is also gives body warmth, patience. The therapy takes place outdoor in the open air, where birds are flying and you can see how they commute from our place down south. The child can mix with nature and being high on the horse and taller than your therapist makes it easy for him to open up and talk about things that bother him.	++++++++++++	++++++++++
2. How do you achieve these aims? At the beginning I give the child easy tasks that he can succeed and I tell him "you see, you have succeeded even though you thought that you will not succeed." Later on I give harder tasks. I also talk about times when he does not succeed. I teach the child to read the horse's body language.		From success a child can learn.
3. How do you see the role of the horse in the therapeutic process? **The horse has a major role**. The fact that the horse is a big animal and the child succeed to control it, this is empowerment.		A child is empowered by being able to control the horse.
4. How is a therapeutic riding lesson different, if it is different, from a sport- riding lesson? In a sport-riding lesson the aims are so the child will		

ride well and be able to compete. In THR the child can ride a year and still will not know how to ride because riding is not the purpose, the main objective is the rider and not the riding.		
Q5. How is a lesson with a child who is diagnosed with ADHD different, if it is different, from a child with a different diagnosis? I do not treat the children differently I start with all the children the same way. After I get to know the child I treat him in the way he needs regardless to what the diagnosis is.		
Q6. In your opinion what do you think that in addition to what exist in the field of THR, should be done? There is a lake of is more support for the instructors, more lectures and workshops. There has to be a library with materials for the instructors so they can get to it and read.		
Q7. Is there anything else that you would like to tell me about your experience as a THR instructor? We covered everything.		
Q8. Describe a THR lesson: Once the child is on the horse I start when walking while we talk about how his week was. Then we play, and we move to a faster speed. We end with relaxation.		
++++++++++++++++++++++++++++++++++ An interview with Vivian, Female 32 years old. THR instructor. 1. What are the aims of Therapeutic Horse Riding in your opinion? **The aims are changing from every client. I need to know what the problem is and to plan the lesson accordingly.**	++++++++++++	++++++++++
Q2. How do you achieve these aims? A: I fit myself and the horse to the patient. I need to know who is coming to therapy and to know everything about the horse. Q*: Can you tell me more about it? A: **I need to match a horse to the child, so that the child can manage the horse, learn how to ride and have fun…** If I have an active child I will give him a relaxed horse and when I have a child who is weak and quiet, I will give him a horse with sharp movement that will weak him up. Each child will get a horse, which is the opposite of his character. The horse is like a mirror to the child's behaviour; when the horse is relaxed and the child is not, then the horse will become restless. The same with using myself as an instructor; when I have a child who is very quiet and needs to be moved, I		

will talk to him in a louder voice than my usual voice, so he can concentrate on me. I stand in the middle of the arena. With an active child, I hardly speak and when I do, I do it in a quite voice so the child will concentrate in the task and not in me.		
Q3. How do you see the role of the horse in the therapeutic process? A: The horse is like a mirror that shows the patient how he behaves. I tell the child what the horse is doing and we discus his reaction. The horse is a therapeutic tool number one who knows how to fit itself to the rider.		
Q4. How is a therapeutic riding lesson different, if it is different, from a sport-riding lesson? A: It is different and the same. In THR the focus is on the problem that the child has and the horse needs to fit himself to the rider. In sport riding lesson the rider needs to fit himself to the horse and sometime it is the other way around but in any case there is less emphasis on the rider. When it is a group I treat it as THR.		
Q5. How is a lesson with a child who is diagnosed with ADHD different, if it is different, from a child with a different diagnosis? A: There is no difference in the lessons. With a child with ADHD I need to find the right horse just like other children with other diagnosis.		Adapting the learning environment to the needs of the learner.
Q6. In your opinion what do you think that in addition to what exist in the field of THR, should be done? A: I would add music to the lesson during riding. There are patients that music makes them relax and this is something we can use in the therapy lesson.		
Q7. Is there anything else that you would like to tell me about your experience as a THR instructor? A: Yes, that the horse is a wonderful therapeutic tool.		
Q8. Describe a THR lesson: A: The first 5-10 minutes I let the rider adjust to the horse, warm up and we talk. The next 15 minutes is the main lesson and the therapy according to the limitation of the child. The last 5-7 minutes it is fun, something that the child wants to do.		
A++++++++++++++++++++++++++++++++++++++ Interview with Ami, Female, 67 years old, THR. 1. What are the aims of Therapeutic Horse Riding in your opinion? **A: I see THR as a holistic therapy, which can be used to help people with various limitations, especially physical limitations. We need to make sure that the client feels good and wants to come back.**	++++++++++++++	++++++++++

Q2. How do you achieve these aims? A: We need to define our role. The instructor needs to know who is coming to the therapy session and he needs to know everything about the horse, which is his therapeutic tool. We need to match the horse to the rider. The horse does the job. He is the therapist.		
Q3. How do you see the role of the horse in the therapeutic process? The horse makes it possible for things to happen. The horse with all its wonderful properties can stimulate the mind and body of the rider and the whole process starts working.		
Q4. How is a therapeutic riding lesson different, if it is different, from a sport-riding lesson? A: The goals of sport riding - sport is really important for health. The same with THR it is important for the client, it lifts his spirit.		
Q5. How is a lesson with a child who is diagnosed with ADHD different, if it is different, from a child with a different diagnosis? A: I don't see much of a difference. The horse does the therapy according to what the client needs. It is hard to say how it really works, but I know that it works. Q*: How do you know that it works. A: From the mare fact that the child comes back to ride. That shows me that he loves it and enjoys the riding and this is important to me.		
Q6. In your opinion what do you think that in addition to what exist in the field of THR, should be done? A: There are too many things that need change and I cannot mention them all, it will take us a whole day. Q*: Can you mention a few of them? A: You see, first of all people don't know much about horses and what they do. I think, that now that THR becomes so popular in Israel, people need to know more about it, so they can benefit from the riding. Another thing is that we need to define our profession and to build guidelines to the sessions with the various populations. Even to publish a guide that will instruct THRps how to conduct the lesions. What I see now even in this farm is that every one has his own way from what he learned and in which he feels comfortable with and everyone works differently.		
Q7. Is there anything else that you would like to tell me about your experience as a THR instructor? A: I think that what I have just said is very important		

and there is much to do in Israel with this field of THR.		
Q8. Describe a THR lesson:		
++++++++++++++++++++++++++++ S. male. 36 years old Q1. What are the aims of Therapeutic Horse Riding in your opinion? A: The aims are working on what the client needs.		
Q2. How do you achieve these aims? A: First of all I make sure to connect with the child, so he will have a good time learning how to ride and that he will want to come back.		
Q3. How do you see the role of the horse in the therapeutic process? A: The horse has a major role in the therapy. The fact that the child is sitting on a horse already does something to him.		
4. How is a therapeutic riding lesson different, if it is different, from a sport- riding lesson?		
Q5. How is a lesson with a child who is diagnosed with ADHD different, if it is different, from a child with different diagnoses? A: In general with children with ADHD we work on concentration and less fidgeting and less impulsivity. By the way, all this can be measured. Q*: How do you measure them? A: I don't measure, I am talking in general.	Therapeutic aims are general and the practitioner does not relate to the different diagnosis and different objectives.	
Q6. In your opinion what do you think that in addition to what exist in the field of THR, should be done? A: There is quite a lot that needs to be changed. We should sit and make a plan for every child according to his diagnosis. This is rarely done. Maybe someone should write a guide with a plan for children according to their diagnosis. That will help in this field, especially that this is a fairly young field in Israel and we try to find the right way for every child, but you know it does not work all the time. This is like a trial and error process.		
7. Is there anything else that you would like to tell me about your experience as a THR instructor?		
8.Describe a THR lesson:		

APPENDIX E: Interviews with therapeutic horseback riding practitioners on: The ethical issue:

Sam:
I see the use of the horse as a natural process that took place between men and horses. I see it as a positive process, as long as we take care of the horse and do not demand more than the horse can give. Horses like to be in motion. The abuse was when man stole the land from the horse but now if horses can help us I do not see why not, this is not an abuse. There are horses that do not like to be used in therapeutic lessons and they don't fit for this. We had a small mare, 'snow white' was her name and she hated it, she would abuse the rider and do everything so he will fall, she loved jumping, and we felt it, we gave her to another farm where the rider jump with their horses. It is important to give the horse what he likes. We need to find the balance between work and rest time that is suitable for each horse.

Hilla:
I believe that riding on horses saved the horses from extinction. Horses could not survive in nature after so much land became industrial and houses were built. The riding instructor needs to know the horses that he works with. We need to build the lessons according to the strength of the horse. We need to put boundaries, but not to fight with the horse. I know the strength of each horse and I don't ask for more than the horse can give.

The Research's APPENDIXES:

APPENDIX F: Hillary's Reports

F.1 Hillary's Parent's Weekly Report:

A day after the first session with Hillary, I spoke to Hillary's mother who reported that Hillary came home after her first riding lesson and:

> "*Hillary insisted to do all her math homework and to* ***organised her bag for school****, things that she did not do in the past. Hillary is* ***more organised*** *and I relate it to the riding. She came home after the riding and said that* ***she enjoyed it very much and was very happy****; she did not stop talking about the riding.* ***It is like having a new child at home****".*

From the first Parent's Weekly Report form I was able to learn that Hillary's ***interpersonal relationship*** with her mother had improved:

> *"Hillary* ***let me touch her and hug her****, she did not like it before".* In addition she added that: *"The math teacher mentioned that Hillary worked very nicely, she is* ***paying more attention*** *and she is more* ***organised*** ***and more in focus****."*
>
> The main objective for Hillary's therapy was that she would learn to control her anger outbursts.

On the second Parents Parent's Weekly Report, Hillary's mother noted that Hillary became calmer: *"Hillary is **calmer** **and** **happier than before,** it is nicer to be around her. **Now that the teacher is** involved with the therapy and after you spoke to her, things started to change. Also Hillary enjoys so much riding on the horse and what you tell her during the lesson helps her so much. Hillary says that to me. She is a different girl from before the riding. She even stopped wetting her bed. You probably did something about it too."*

In her fourth Parent's Weekly Report the mother wrote: *"We all went to Jerusalem to the Waling Wall and we had a great time. Hillary put a note in the wall. **She behaved very nicely** all the way and we bought her two new dresses and we feel blessed that Hillary is in your programme."*

During the fifth week of our Therapeutic Horseback riding programme, Hillary's mother gave birth to a baby boy. The Parent's Weekly Report said: *"Hillary came to the hospital to visit me and see the baby. She was very happy."*

On the sixth Parent's Weekly Report to me the mother wrote: "*Hillary is very helpful to me with taking care of the baby, she is very happy to help also with her younger sisters, she also **organised** **things around the house and she is calmer and relaxed**."*
In addition the mother reported that during the party for the newborn baby: *"Hillary showed **caring and sensitivity** during the party she was the only one who noticed that her grandmother had difficulties getting up from her chair and ran to help her. The grandmother was very moved by that and did not stop talking about it and to admire her grandchild."*

On the eighth Parent's Weekly Report the mother wrote: *"During the weekend we had a family gathering and one of the girls got burned and Hillary took care of her the whole time. The girl's mother sent my mother (Hillary's grandmother) an e-mail, which I am forwarding to you. "I would like you to give your dear grandchild warm kisses and a big thank you on the huge emotional support that she gave my granddaughter. Your gorgeous granddaughter **took care** of my granddaughter with all her heart; she played with her, made her laugh and came to visit us later and see how she feels. She is so **responsible.** Hillary is simply a rare child and astonishing."*

On the ninth Parent's Weekly Report the mother wrote: *"Hillary is **happier, has less anger outburst and she is less frustrated than in the past. She is able to concentrate, to be in focus and listen to what we tell her. This is a big change."***

On the tenth Parent's Weekly Report the mother wrote: *"Hillary **is calmer than before,** her brother bothered her and she did not get into a fight with him, as she used to do in the past. Instead she went and talked to me. Hillary said to me that **she feels more in control and that she is able to overcome her anger outbursts."***

On the eleventh Parent's Weekly Report the mother wrote: *"During this week Hillary had good evenings without anger outbursts, **she controlled herself and was very proud of it. She feels very brave in doing so."***

When I met the mother during our twelfth week, she reported to me that "*on Saturday Hillary was very angry the whole morning and she did not want to talk about it.*"
On the thirteen Parent's Weekly Reports the mother wrote that *"Hillary received an excellent report on her school diploma and we* ***celebrated****, made a "diploma party" on that occasion. Hillary felt very proud for her success."*

On the fourteen Parent's Weekly Reports the mother reported: *"Hillary visited her Aunt in Tel-Aviv and* ***succeeded*** *to learn how to make jewelry and now she is making jewelry for every one and enjoys it very much."*

On the sixteenth Parent's Weekly Report the mother wrote that Hillary and her younger sister moved to a separate room, Hillary ***organised*** her room and was very ***happy***.

On the eighteenth Parent's Weekly Report the mother wrote that Hillary together with her brother and mother painted her room in purple and it came out great. Hillary was very ***proud*** of herself and the fact that she could ***concentrate*** and she was very ***happy***.

On the nineteenth Parent's Weekly Report the mother wrote that: "*Hillary* ***organised*** *rules for her new room together with her sister with whom she is sharing the room. She conducted a 'room meeting' and negotiated the rules with her sister. Hillary was very* ***happy*** *and* ***satisfied*** *by the fact that she succeeded to* ***organised*** *the matter this way and to write the rules and that her sister agreed to them."*

On the twentieth Parent's Weekly Report the mother wrote that: *"We had a very good week. Hillary* ***made a big change – a breakthrough – she tried very hard to overcome her*** *difficulties and to get along with her brother. She is very happy and proud of herself."*

On the twenty-first Parent's Weekly Reports the mother wrote: *"there was a meeting at school with the educational counselor and the home class teacher. They praised Hillary and said excellent things about her. Like how* ***she is more organised and able to concentrate, be in focus and copy from the blackboard and how she participates and that she is friendlier****. I had tears in my eyes. I was so happy and excited and proud hearing all that and went to Hillary's class and asked to see her in the middle of a lesson. I told Hillary about the meeting and Hillary was extremely happy."*
In addition the mother stated that in-spite of all the changes the Hillary made, they had a bad day during a visit they made to the army camp where her father serves. *"Hillary teased her older brothers and did not stop until they hit her and then she did not stop saying how miserable she felt and that her brothers hit her. She was screaming. I asked her to stop, but she did not stop.* ***It was difficult for her to control herself.****"*
In cases of regression the manual calls for changes in the session plan. It was important to focus the treatment on the past successes and renew the client's a positive vision of family life.
(From the research diary: *"I spoke to Hillary when she came to the farm after this incident and reminded her of her past successes and let her talk briefly about the*

incident while focusing her on her success in controlling the horse and her anger outburst. I insisted to focus her on the successes she had had in controlling her anger just like she succeeded to control the horse. Hillary stated that she does see the parallel in the situations.")
23- *"In the past few weeks there were no anger outbursts. There was a parents' meeting at the school and we heard wonderful things about Hillary. Hillary was very happy that she had improved in all her subjects, thus attaining the goals that she had set for herself:* ***improved reading, improvement in math, and making friends. She is able to concentrate, be in focus and copy from the blackboard.*** *We have set new goals: borrowing books from the library and to continue the improvement in math.*

24 – Hillary has a new friend and they both signed up for ice-skating. Hillary is very happy going skating with her new friend.

25 – We spent the weekend in the kibbutz, visiting grandma. Hillary has two good friends at the kibbutz and she spent all the time there being with them. Hillary is happy and feels powerful.

26 – Hillary is more relaxed and happy. She was invited to two birthday parties of good friends and she enjoyed it very much. Hillary is much more sure of herself.

27 – Hillary's grandparents bought a big swimming pool and Hillary loves the water, it relaxes her, she is happy in the water and can stay for hours in the pool.

28 - We have celebrated our older son's birthday at the grandparents' pool and Hillary helped a lot. Hillary brought a very good report card from school.

29 - Summer vacation started and Hillary started mothers-daughters camp and she enjoys it very much.

30 – This week the mothers-daughters camp was at our house and Hillary behaved very nicely and I see how she matured and what a charming girl she is.

APPENDIX F.2 Hillary's Teacher's Reports:
Hillary's Teacher Reports note the big changes and successes that Hillary had accomplished. The teacher reported that Hillary was listening and participating during the lessons, which she hardly did before the THR.
On the tenth week, the teacher sent a report saying:

> *"Hillary* ***listened and participated i****n Tora (Bible) class.* ***She is able to concentrate and be in focus. She is more relaxed in her chair and does not get up and move as much as she used to do. She succeeded to copy everything from the blackboard****. In language studding: Hillary read very nicely and worked excellently. In social class: Hillary participated nicely. Hillary is very charming. This is a big change from what she used to do".*

During the thirteenth week I spoke to Hillary's teacher who reported to me that:

> *"Hillary had **made big changes in all aspects since she started THR**. Her **self-confidence is higher.** I can see it also in her body language, she walks more sure of herself. **Her reading abilities improved. She can concentrate** now and that helps her a lot. Hillary is **calmer** and **more cooperative**. She is **taking more responsibility for her studding**. Hillary **told me that because of her horseback riding and what you teach her during the lessons, and her successes in the riding skills, she is able to succeed at school. There is no doubt that since she started with horseback riding, I see a big change in her, she has improved tremendously**."*

The teacher added that:

> *"There is **more cooperation from the parents with the school.** They ask about Hillary more than in the past and they are willing to hear what is told to them. In the past they denied that Hillary has a problem due to her having ADHD, today they are willing to accept it and they changed their attitude towards her. It seems like to me that the parents are investing more quality time with Hillary, they reinforce her positive behaviour, all this is shown very well in the big change that Hillary has made. I also see a change in her social skills, even though there is still a problem. Hillary does not have many friends in the class, also because she looks bigger than the rest and also because they do not live close by."*

After 30 Therapeutic horseback riding sessions the teacher reported that there was an improvement in Hillary's performance at school, socially, academically and in her behaviour.

"Hillary made a big step in succeeding academically, **she listens and contributes a great deal to the social activities**. She succeeded in making friends from her class. There is also **a big improvement in her concentration during the lessons;** she succeeded to copy from the blackboard with no difficulty and to stay in focus during the lessons. Hillary shared with me that the riding sessions and the connection with the horse helped her to achieve all

these changes. Hillary is very happy that she succeeds to get organised before the lessons and said to me: I am happy that I succeed to be ready and organise at the beginning of every lesson. The teacher appreciates me in front of the whole class and that make me very happy."

APPENDIX F.3 Hillary's weekly successes report:

Hillary was fully engaged in the therapeutic process right from the start. She knew that she was coming for therapeutic riding and not just to learn how to ride on a horse. She knew what were the objectives we were working on, and she was willing to report to me every week the successes she had.

First week: *"I have started **to be more organised;** I arranged my pajama on my pillow. **I organised my school papers and the shelf with the school materials**. I put the towel in the bathroom next to the shower. I put my laundry in the laundry basket. In school, I made sure that my table is not full. **I organised my drawer**. I returned the library books to the library."*

Hillary's answer to my question: Where do you need to stop at home (from learning how to stop the horse), which was given to her as homework was*: "I need to stop my anger when I am angry. I need to stop yelling. I need to stop horsing around and making everyone upset with me."*

Second week successes report Hillary reported 9 successes: *"I succeeded to ride well on the horse and do everything I was told to do. At home I succeeded to* ***keep my room organised*** *and I did all my homework. I succeeded to* ***stop my anger outburst*** ***and not fight*** *with my brother who really annoyed me. I succeeded to make a necklace out of beads with my grandmother. I helped my mother at home. I got 100 in science. I succeeded to copy everything from the blackboard. I approached one of the girls in class and we became friends."*

Fourth week report*: "I succeeded* ***to stop myself from getting into a fight*** *with my brother, even though he hit me. I told my mom and she took care of it."*

Seventh week report: *"We went to visit my grandmother for the week-end and grandma explained to me how to get to a girl who lives in the neighborhood. I drew a map and I succeeded to get to that girl all by myself and I enjoyed playing with her. I also succeeded to play with my brother at home and in the yard where there was a duck and I succeeded to move the duck away from us. In addition, I help my mother a lot in the house and with our new baby. At school, the teacher told me that I have improved a lot, and I am very happy about it. I also succeeded to stop two girls from fighting. I looked at them and I asked them why they fought and after they told me that it was over a stone that they found, I told them there was no reason to fight over it. I gave each one of them a candy that I brought to give at school on the occasion of the birth of our new baby, and they promised me not to ever fight again."*

When I asked Hillary, "how do you succeed, how do you do all that", her reply to me was: *"****It is all because of the horseback riding****."* I continued to ask: How is it because of the horseback riding? Can you explain?" Hillary's answer was: *"everything that we do together, and what I do on the horse, when you tell me to do something with the horse,* ***I listen and I pay attention to what you tell me and I concentrate****, I look at the horse, and I do it successfully. At school I do the same, I* ***concentrate*** *on what I was told to do by the teacher and I do it. I succeed much more than in the past, before I started to ride on the horse."*

On the eighth week Hillary reported to me 6 successes*: "There was a girl that got burned and I helped her. I also made her laugh, so instead of crying she was laughing. In school there were eight pages to complete and I completed them before everyone else. At home I had no homework because I did them at school. Before I started to ride it was very hard for me with the homework and with coping from the blackboard, now I am the first in the class.* In addition Hillary said: "*At 5 o'clock in the morning the baby was crying and my father tried to calm him down and he did not succeed. My mother tried to breast feed him, but he did not want. At the end I took him and I succeeded to calm him down and he fell asleep on me and then I put him in his crib. They all tried and I was the one to succeed with him. Also in school the teacher gave me 30 'coins' (points) because I gave my only lollypop to a girl who was not allowed to have a regular candy, because she had teeth braces. Usually we only get a few 'coins' (points) for* ***doing something good****."*

On the ninth week success report Hillary had 5 successes*: "At school I* ***completed 30 questions first*** *from all the rest of the class. I succeeded to present in English in-spite of the fact that I had a headache. A girl from my class made me really upset*

and I succeeded not to hit her, even though I really wanted to. At home I mapped the floor of a whole level. I succeeded to help my mother with my baby brother."
On the tenth week success report Hillary had 6 of them*: "I kept the play room and the living room neat the whole week-end so on Saturday evening we had time to bake a cake. I succeeded in writing a 2 page nice composition.* ***I succeeded to read a story very nicely and the teacher was moved by the way I read****. The story had 50 rows! I helped my mother in choosing cloths to wear. My mother trusts my taste, and I succeeded to show her what fits her and what does not. Yesterday evening I behaved very nicely and I controlled my anger outbursts. My mother was very proud of me. Yesterday, my brother really bothered me and I did not get into a fight with him, but I told my mother."*
The week later Hillary brought the composition she wrote, to show me. She wrote about a bad experience she had at home: *"When I came back from school I was very angry. My brother made me even angrier and I could not calm myself. I started to scream, to hit and I could not stop. My parents did not find a solution and they did not know what to do. I was rude to them more than ever and* ***my father slapped me*** *and* ***yelled at me****. I cried because I felt very sorry for behaving badly and I crossed all limits. I went to bed and my sister came to help, but I did not want her help. My mother suggested that we should ask the horse teacher what exactly we should do with this problem. So, this made me calm down and I was waiting for our meeting, I knew you will help me and give me a solution."*
On the eleventh week Hillary brought me a drawing that she made for me with her picture and a drawing of a horse in a shape of a heart. She wrote: *"Thank you for everything you have taught me with love and concentration. Without your teaching I would not have advanced."*
12 – I succeeded to ride well and trot. I overcame my anger. I received a very good grade in math. I succeeded in arranging the toys. I succeeded to copy everything from the blackboard. I succeeded in completing all my math homework during the break. I succeeded to concentrate during the lessons at school.
15- 14.3.2012 – I succeeded in Tora (bible studding) and received a grade of 100. I succeeded in helping my mother. I succeeded to calm my baby brother who was crying. I succeeded in overcoming my anger and I did not fight with my brothers. I succeeded in making a necklace for my sister, earrings for my grandma and for myself.
16 – 21.3.2012 – I succeeded in dictation and received a grade of 100. I succeeded to study science all week with no problems (it was difficult for me before). I am able to concentrate and be in focus. I helped my mom to organise the house for Passover.
17 – 4.4.2012 – I succeeded in painting my room. I succeeded to overcome my anger. I succeeded in roller-skating outside on the pavement. I succeeded to hurry up and take a shower when I was told to do so. I succeeded in washing the dishes with gloves on my hands. I succeeded to wash the kitchen chairs with soap and water. I succeeded to help my mom to clean the car. I succeeded in being a charming and a sweet girl.
18 –18.4.2012 - I succeed to get up in the morning all by myself. I succeeded in organising my room. I succeeded in overcoming my anger. "You don't know how much I love you."
19- 22.4.2012 – The whole week I did not have any anger outbursts. I succeeded to study for my English test. I helped my mom a lot. I succeeded in finding solutions for my anger. I received 11 points for good behaviour in school. I succeeded in

yielding and making concessions to sisters. I told my mom to talk to my brother and I did not hit him. I wanted to remember to write my success list. I succeeded in writing this list all by myself. I succeeded in listening to the sea in the seashell. I succeeded in reading a book before dinner. I succeeded in taking deep breaths.
In addition, Hillary prepared a greeting card for me on the occasion of my upcoming presentation of my research in Athens wishing me a great success and telling me not to forget to say important things.
20 - 6.5.2012 "My mom cried from excitement when she heard my teacher speak of me. Three newly acquired girl friends visited me last week. Every day a different friend came. I washed the dishes and helped my mom.
21 -13.5.2012 – I succeeded in reading a whole story. I succeeded to organise the toys in spite of the fact that they called me lazy. I succeeded in finding trousers all by myself. I succeeded in helping my mom.
22 – 1.7.2012 – I succeeded in tidying up my room. I behaved very nicely and helped a lot during my brother's birthday party. I went to school in a math day in spite of the fact that I did not want to go. There are much less fights between me and my brothers. I succeeded in washing the dishes. I signed up for mothers-daughters' summer camp.
23 – 15.7.2012 – I succeeded in remembering to write the success list. I succeeded to go to the summer camp in spite of the fact that I did not want to. Yesterday I miss- behaved and I succeeded to write an apology letter to my dad and mom. I try very hard to help my mom, to keep the order in the house and to organise my things. In the 'mothers-daughters summer camp' I am with girls from school whom I did not get along with and now we are getting along well and I enjoy their company.
24 – 22.7.2012 – Two friends called me today and invited me to play with them.
25 – I succeeded in understanding that the horse makes me feel calmer. When I am angry the horse does not listen to me. The same with people, they can only listen to me when I am calm. I hardly fight with my brothers. I do not bother them as I used to do. I am more organised because I am relaxed. I succeed more at school and with my relationship with my friends.
27 – My mom and I succeeded in organising my room. I went to a friend for her birthday party. I helped my mom in taking care of my younger sisters. I succeeded in remembering what groceries we needed to buy.
28 - *I behaved very nicely during my brother's birthday party and I helped a lot. I went to school in spite of the fact that I did not feel good and I did not want to go. There are fewer confrontations with my brothers. I washed the dishes. I signed up for a mothers-daughters camp, which will take place during the vacation.*

APPENDIX F.4 Research Diary: Hillary

Nov.16, 2011 – Hillary and her mother came for the Intake. Hillary is very friendly and I believe that she will cooperate with me. I explained to Hillary that our meetings are therapeutic sessions and that she will need to work at home and in school in order to transfer skills that she will learn in the farm. She will also need to provide me with a list of successes every week. I asked her if she is willing to do all that. Hillary agreed. I was happy about it. I had a good feeling regarding Hillary and her motivation to succeed. Hillary said that she understood what I told her about the research and showed an interest to begin. Hillary impresses me. She is lovely and talkative. She said that she loves horses and wants to learn how to ride.
It was very important for me to make sure that Hillary and her mother understood that the meetings with me are for therapy and the main goal is that

Hillary will be able to transfer the skills that she learns during our sessions to other environments, the home and the school. I said to Hillary that what we learn during the Therapeutic Horseback Riding sessions could assist her outside the therapy, in school and at home. Hillary was excited and said: *"I need to work on my anger outbursts!"*

Nov. 23, 2011 – We worked on the ground for the first half of the session. I wanted Hillary to get to know the horse. I watched Hillary near the horse brushing 'Joy'. Hillary was relaxed and happy to touch 'Joy'. We talked about how important it is to be relaxed near the horse, so the horse is relaxed too. Hillary was excited to do all that I have asked her. She **followed all my verbal instructions and I told her that.** I used verbal reinforces. We brushed the horse together and cleaned the hoofs. We put the saddle on the horse and the bridle. I showed Hillary how to lead the horse to the arena. She did everything really well. I commented on the fact that she listens to my verbal instructions and act on them very well. Hillary seemed happy to hear that. Hillary learned how to move the horse forward and how to stop the horse. When I asked her **'where else do you need to stop like this, when you are outside the arena?' her reply was quick:** "***I need to stop my anger.*** My reply to her was ***'If you can stop this huge horse whenever you want to, it should not be difficult for you to stop your anger from flaring up' I said. 'Do you agree?' 'Yes! I can do this! I did it on my own!***
I reinforced Hillary for her reflective thinking and I waited for her acknowledge. Hilldary said: *"Yes, I know I did it right, I did it! I did it! I understood right away!" "Great! You did it! You did it very well", and we did a 'high five'"*

Nov. 24, 2011 – From the mother's Parent's Weekly Reports I was able to learn that Hillary was using the following skills and strategies: Organisation, concentration, focusing, calmness and building and maintaining interpersonal relationships on a regular basis.
I spoke to Hillary's mother and learned that Hillary **understood the idea of transfer I taught her. She succeeded to transfer the skill of being organised to the home. She organised her bag for school and insisted on doing all her math homework. Transfer did work!!!** I instructed Hillary's mother **to celebrate this success by giving positive feedback to Hillary.**

Nov.30, 2011 – I worked with Hillary on **celebrating success,** an activity that leads to empowerment. After every success that Hillary showed me on her list of successes, big or small, I exclaimed: Great or wow, and clapped my hands and at time jumped up and down until Hillary joined in the celebration, which showed me that Hillary learned to celebrate her successes.

Dec.7, 2011 – Hillary brought a list of 9 successes she had this week. We went over the list and I told her how proud I was with her. We have continued to work on organisation, planning, stopping the horse and walking the horse through slalom using two cone markers.

Dec.14, 2011 – Hillary had informed me that her mother gave birth to a baby boy. She was very exited.

Dec. 21, 2011 – Hillary reported to me that she had no successes this week. When I checked farther with her it turned out that she had many successes, especially in social interaction with classmates. Her grandma who brought her to the farm also

reported that Hillary succeeded in making a doll out of beads. She also **succeeded in controlling her anger outbursts and did not react to her brother's behaviour towards her.** Hillary seemed tensed and preoccupied. I asked her if she is facing a dilemma and she responded in the affirmative, and reported that: *"two friends asked me to stay over in their house. I don't to whom to go."* I have adapted the lesson to facilitate Hillary's awareness to what is happening to her and to how she feels about it. We enter the arena and I asked her to choose between two tasks according to the one she favors the most. Hillary said that she liked both tasks and that she would like to do both of these tasks one after the other and asked me if it is possible? I agreed. Then I herd Hillary screams with a delight: ***"I can do the same with my friends, I like them both and I can go to one friend one day and to the other the next day. This really helped me to make my decision."***

Jan.4, 2012 – We continued working on "listening to verbal instruction" in order to strengthen this skill. Hillary succeeded in everything I told her to do with the horse: turning around cones, walking in circles, stopping the horse. We talked about how Hillary can transfer these skills to the school and the house. The mother told me over the phone that Hillary is very responsible and she is helping her in taking care of her new baby brother."

Jan. 11, 2012 – It was raining hard so we worked with horses inside the stables; putting the headgear, tying the horse, getting the horse in and out of its stable, safety, planning and being organised. Hillary was organised, she was in focus, followed my instructions. I told Hillary that she was great.

Jan.18, 2012 – I was told that Hillary did not succeed in controlling her anger outbursts this week, so we worked on ways to relax, which is very important especially next to the horse. Hillary understood that. I taught Hillary how to take deep breath, and together we put a list of activities she can choose to use when she feels angry: to listen to music, take a shower, write me a letter, to listen to her parents like she listens to me during our THR sessions and to remember how well she had done it before.

Jan. 25, 2012 – I worked with Hillary on concentration. She used a ball to hit cones. Needed to concentrate, plan and perform. She did very well.

Feb. 1, 2012 - Today Hillary told me it was her best session. She succeeded in moving the horse in different directions. She felt in control. Succeeded to play basketball from the back of the horse and was very proud of herself when she hit the ball. We talked about what it takes to succeed in doing all that and Hillary said: "I can do all that when I concentrate, I am in focus, organise myself at the home, I am relaxed and I plan my moves. She really got it!!!! I am so proud of her and what she achieved.

Feb. 8th, 2012 – Today Hillary rode on the horse named Shalva because Joy injured her leg. It was difficult for Hillary to make Shalva move and she felt frustrated. This was a great opportunity to talk about change and when things are not easy for us, do we give up or try hard until we succeed. Hillary chose to try hard and she succeeded and was very proud of herself. That called for celebration.

Feb. 15th, 2012 – Hillary brought her school report to show me how much she had improved since she started therapy with me. She received a very good report. When I asked her mother, who had become of Hillary's bed wetting, she reported that Hillary stopped wetting her bed long ago a week or two after we started therapy. The mother asked me what I did during therapy so that Hillary stopped wetting her

bed. I have asked Hillary how did she succeed to stop **wetting the bed** and Hillary said that it is because **she felt good and more confident, in control and sure of herself since she started THR,** that the bed-wetting just stopped by itself.

Feb. 22, 2012 – Hillary came in a very good mood. She brought a nice list of successes. She was happy to ride on 'Joy' and we worked on trotting. She compared it to her **music lessons and indicated that riding helps her to concentrate also in music lessons.** I have realised that **Hillary manages to compare what is happening on the horse to what is happening to her in school and at home.** I had worked on facilitating the transfer of skills to the home and to school. Her discussion of her music lessons during THR was entirely her own reflective initiative. She succeeded well with the trotting and I gave her a positive feedback. She was happy.

March 14th, 2012 – A rainy day. We worked at the stable, putting headgear and taking it off the horse's head, brushing the horse. We talked about the different horses in the stable and what each horse expresses.

March 21, 2012 – Hillary rode on the horse named 'Baz'. We worked mainly on paying attention to details so she can do the same at home and in school. She made sure she sat on the horse the right way with her heels down, straight back and her hands are down and forward. She succeeded very well with the slalom. To my question on regarding "in what other situation is attention to details important?", Hillary said that it is very important for her to pay attention to details also in school and at home and that **she is going to apply what she had learned on the horse, to the home and to the school.**

March 28th, 2012 – Hillary came to the farm with a friend. She was very happy when this friend wanted to come and see her riding. Hillary reported to me that now she has some good friends and this is good for her. She rode on Joy and managed to trot and be in balance and maintain her concentration.

April 4th, 2012 – We worked in the round pen. Hillary's father came and watched her riding. He told her he was very proud of her seeing her trotting so nicely.

April 15th, 2012 – We worked in the big arena on Joy. Hillary rode without her legs in the stirrups. This was new and exciting for Hillary. Hillary jogged and trotted and did very well.

April 19th, 2012 – I called Hillary's mother. The mother reported that there is a huge improvement in Hillary's behaviour and in all the ADHD symptoms. Her social life had improved and today she went to visit a friend. She stopped teasing her brother and there are no more anger outbursts. I felt great hearing all that. It showed me very clearly that the therapy with Hillary does work. I asked Hillary's mother to continue to reinforce Hillary's successes and celebrate them.

April 22, 2012 – Hillary brought a page full with her successes during the week. She reported to me that she feels very good about herself and that she is succeeding to stop her anger outbursts toward her older brother who always teases her and it is not easy for her. First we worked in the round pen and then we went out on a field trip and practiced deep breathing on the horse's back, looking at flowers and trees and connecting with nature. Hillary loved the trip and said that she felt so much more relaxed and that she will think about this trip when she feels a bit angry.

April 29th, 2012 – The mother and Hillary reported to me that Hillary had a hard time with her brothers on Saturday. **I spoke to Hillary when she came to the farm after this incident and reminded her of her past successes and let her talk**

briefly on the incident while focusing her on her success in controlling the horse and the anger outbursts. I insisted to focus her on her success in controlling her anger just like she succeeds to control the horse. Hillary stated that she does see the parallel between the situations."

May 6th, 2012 – We worked on concentration and planning how to throw a ring around a cone. Hillary succeeded well. She understood that in order to succeed in throwing the ring around the cone she needed to concentrate and plan her moves. We talked about transferring these skills to her world outside the farm, to the school and the home.

May 13th, 2012 – We worked in the round pen on Joy. The topic was control – trying to ride at the shoulders of the round pen and not to let the horse go to the centre. It was not easy at the beginning, but she succeeded.

May 20th, 2012 – Hillary rode on Joy. We went out on a field trip. We talked about how Hillary can take control of 'Joy' by herself with out me leading her as I used to do in the past and what skills she needs in order to do that. Hillary stated that she needed to be in focus, concentrate and be organised. Hillary led Joy all by herself out in the open field. She was a little bit afraid from the hill outside the farm. I encouraged her to try. She succeeded and was very proud of herself. When we came back we worked in the round pen and Hillary jogged.
Hillary reported to me that the THR helps her to concentrate in school and that she succeeds to copy everything from the blackboard without problems. In addition during Gem lessons she succeeded to concentrate instead of being busy with what the other girls are doing as she used to do before, the same during Drama lessons.

June 10th, 2012 – Hillary came with her grandmother. I showed them the filly that was born just a few hours before. Hillary was happy to come back after two weeks that she did not ride. She jogged by herself. I could tell that she was capable of moving the horse better than in the past, she succeeded to concentrate, be in focus and in control.

June 17th, 2012 – Hillary and her mother said that Hillary is interested in continuing with the therapy beyond the thirty sessions. We talked about the skills that she gained in therapy and how she is transferring them to the school and the home. Hillary rode on Joy in the round pen and worked on the right way of sitting and the right way of holding the reins. She is still holding the reins too high.

June 24th, 2012 – We worked on relaxation and anger control. Hillary was relaxed and as always did what I instructed her to do. We prepared the horse for riding, grooming and putting the saddle on. We talked about how she can be relaxed when she is with her brothers. In addition we worked with Joy mainly on concentration, holding the hands in the right position (Hillary tends to bring her hands up, too high).

July 1st, 2012 – Hillary reported to me that she succeeded to be calm the whole week and that our last session did help her to relax and stay calm. She succeeded with the jog and the trot. I asked her what skills she had to use to succeed. She answered that she used organisation, focusing, concentration and planning. I asked her to explain how she used these skills and she did.

July 10th, 2012 – Hillary came in a very good mood. She reported to me that she was doing very well at the mothers-daughters summer camp. She gets along with the girls in the summer camp, she feels in control, focused and more organised. Hillary reported to me that she had realised that the horse listens to her when she is

relaxed and is not angry. The same with people they will listen to her only when she is relaxed and not angry. Hillary brought a long list of successes and was proud of herself that she has many friends now. We celebrated her successes.

Aug. 5. 2012 – I made a house visit to Hillary's family. I received a letter from Hillary's parents summarising Hillary's Therapeutic Horseback riding sessions. Here is the letter:

APPENDIX F.5: A letter from Hillary's parents, which was written after the completion of thirty sessions.

Aug, 05, 2012

For Dalia,

This is a summary of 30 therapeutic sessions with Hillary.

Dear Dalia,

We've come a long way, after 30 sessions, it is an excellent time to summarise even a little bit of all the fruit and wonders that we see so far.

First - When we arrived at the farm for the first time we were very skeptical of how much the riding can help and change. Friends told us that their children were in therapeutic riding and nothing happened, nothing has changed.
We decided to try anyway!

We were very pleased when we were told at EZ farm that Hillary would be with a doctoral student who is conducting a research on children with Attention Deficit Hyperactive Disorder. It's really a gift from heaven!

Hillary has ADHD, she is being treated with Ritalin (not during riding sessions). In addition, Hillary is receiving tutoring and emotional Art Therapy at school.

We feel that the push, which was the most significant for Hillary came from the therapeutic riding treatment.

Hillary and we are connected to Dalia, the therapist, (to you). You are professional and have an extensive knowledge and experience.

Your experience and your knowledge with the great love and care that you give Hillary, caused her to undergo the most significant processes.

The therapy and the riding on the horse along with the transfer of skills to everyday life that you taught Hillary, led her to emotional maturity. During this year we feel that Hillary really is and has a new spirit, a more mature adult spirit.

In addition, in terms of self-restraint, Hillary does much better in controlling herself and restraining herself. While before the therapeutic horseback riding there

were almost no barriers, there are a lot more today and Hillary manages to restrain and control herself in many more instances.

As for Hillary's self-esteem it also improved and continues to improve. As a result of her wonderful riding on the horse and her controlling such a huge animal, Hillary learned to appreciate herself more. The fact that you met regularly every week at the same time was very important to her and added continuity and stability to her life. Hillary is waiting for and expecting these meetings.

During every session you managed to point out the connection between the therapeutic horseback riding and her daily living. Hillary learned to plan, control and focus. You have taught her how to bring these skills and tools to every moment in her life.

The relationship with you and this wonderful animal – the horse, contributed to Hillary a lot. Hillary really fell in love with horses!

During the last session when Hillary was on the horse who was bitten by a cattle fly and started going wild, you and another instructor understood what was happening and managed to get control over the situation. Through this experience you have taught Hillary how to cope in stressful situations and in unexpected situations.

Thank you for the phone calls you have made to us, which showed us your interest and care, your desire to know more and help as much as possible.
True – there is more to go, but we also look back and see how much we went so far and how much Hillary has progressed happily and safely!

We thank you and are pleased that we continue together for more progress!

We wish that God will send you health, happiness and success in everything you do and that many more children will learn and progress with you as our daughter is advancing and succeeding.

With great appreciation,
Hillary's parents

APPENDIX F.6 Seven months after therapy I spoke to Hillary and her mother:

Hillary indicated that she was still using what she considered to be riding skills at home and in school. For example Hillary reported that she was using a technique used to stopping a horse during an emergency situation, 'emergency stopping' which I taught her, at home or in school to better control her anger outbursts. Hillary reported that when she felt an anger outburst coming on, she hugs herself real close to stop the anger outburst and when at home she goes to her room and hugs herself tightly until the anger passes. "It works for me!" she said. This procedure is very similar to the one used by horseback riders to stop the horse. Hillary was able to transfer skills learned during THR from the first day we started THR and she was still using the skills and strategies she learned during our sessions after seven months.

The mother reported to me: *"I am so happy that Hillary kept what she gained with you and did not go back to her old behaviour. I was really afraid that she would. Thank God she is much calmer than she was before you worked with her. She is more open, she has friends that come to her. The teachers have good things to say about her. She is pleasure to be with."*

APPENDIX G: Saul's Reports

APPENDIX G.1: Saul's Parent's Weekly Reports:

January 25th, 2012 - On the first weekly report the mother wrote that: *"Saul went to play bowling with his father he behaved nicely, there were* ***no anger outbursts*** *and he enjoyed the game very much. Usually he gets frustrated and angry easily*."
The following week there was an improvement with Saul's concentration:
On January 31st, 2012 - the mother wrote that: ***"There is an improvement in Saul's behaviour in school****. Saul said that he tried very hard to concentrate and do what he was told by you during riding regarding helping himself to concentrate and he was happy that he succeeded."* **(transfer!!!)**
On Feb. 07, 2012 the mother wrote: *"According to the home class teacher, Saul misbehaves only during some lessons when he is actually checking the reactions of these teachers. The mother added that* ***these teachers punish him, usually by asking him to leave the class****.* ***They think that by punishing Saul, he will change his behaviour. It simply does not help, on the contrary, he gets even angrier. He does behave very nicely during the home class teacher****. It shows me that he can do it. When the teacher treats him nicely with respect, he behaves himself."*
In addition the mother reported to me that in spite of the fact that Saul misbehaves, he has a high self esteem and he shows it as if saying: "I am worth a lot."
On Feb. 14, 2012 the mother reported on another improvement in Saul's behaviour during a meal in a fancy restaurant: *"After the therapeutic horseback riding session we all went to a fancy restaurant to celebrate Saul's improvement. Saul is not use to go to such a fancy restaurant, and he was well behaved and spoke about this experience the whole week. Saul indicated that* ***he felt calmer after the riding and that helped him to be on his best behaviour****."*
In addition, the mother sent me Saul's school's report card, which showed great achievement in academic studying, but still indicated on behavioural problems during lessons that are with other teachers (not with his home class teacher).
On Feb. 21, 2012 the mother stated that Saul had improved in organisation: *"We bought a book case for Saul's room and he was happy to organised it and to design his room. He had ideas on how to design his room and felt proud of himself. In regards to his behaviour in school, we feel that Saul's exaggerates when he tells us about his misbehaving in school. When we look at the teacher's notes it is different than how Saul's describes the events. The teacher's report is on a misbehaving for a very short time and right away Saul 'put himself together' and behaved wonderfully. We feel that Saul is very hard in judging himself and sees his behaviour in a severe way than it actually was."*
On Feb. 28, 2012 the mother reported that: *"We went to visit our family who lives far away from us and we don't see them often. Saul was happy to play with his cousins and was well behaved, he was relaxed and there were no anger outbursts."*

On March 06, 2012 the mother reported that: *"Saul had decided to put a "skeleton wearier" costume for Purim (a Jewish holiday in which people put costume and go to a party with it). When I asked him why he chose that particular one he said that* ***he felt more in control of himself*** *and that costume is for older children, more mature. The teacher reported that Saul had improved his behaviour, but still needs to improve more during other teacher's lessons."*

On March 20th, 2012 the mother wrote: *"Saul received a role in a play in school for a 'Health Week' and he was very proud of himself and learned by heart everything he had to say."*

On March 27, 2012 the mother reported that*: "I had to go away for a couple of days and Saul was well behaved and helped his dad to take care of his younger brother and the house. Saul told me that he felt that* ***he was calm and in control.*** *He was very pleased with the way his father asked him for help while I was away."*

On April 03, 2012 the mother reported that: *"Saul is now on Passover break and he likes very much to go to a club he usually goes after school. He enjoys the activities there and his behaviour had improved a lot. In addition* ***Saul had improved in getting organised in the morning. This is a big change."***

On April 11, 2012 the mother reported that*: "During the holiday we visited our relatives and Saul enjoyed very much to play with his cousins his age. In addition* ***Saul had friends over and he was well behaved****. We were proud of him." In addition Saul was very independent to get up in the morning when he wanted and to do as he pleased. Saul behaved very nicely.* ***He was calm and listened to what we told him to do."***

On April 17, 2012 the mother reported that: *"I am used to celebrate the Mimona (a ceremony being observed at the eighth evening of Passover), unfortunately we did not go to my family to celebrate with them so I prepared the pastry with Saul. At the beginning Saul was very upset that we are not going to celebrate with my family, but when I made him participate with the baking of the pastry, he became calm and said: "even though we did not go, we eat the pastry just like grandma makes" and he liked the idea.*

"The first two days back to school were difficult for Saul and the teachers sent us notes telling us that it was difficult for Saul to focus and concentrate. On the third day we received positive feedback from the teachers, reporting that Saul is behaving himself and is able to focus and concentrate.

On April 22, 2012 the mother reported that: *"At the beginning of the week Saul got angry a lot and it was hard for him to calm himself. During the weekend we visited relatives in Natanya. Saul was well behaved; he was calm and enjoyed himself very much. He went with his cosine to visit an animal farm and was very excited telling us how he milked a goat."*

On April 28, 2012 the mother reported that: *"During Independent day we went to visit relative and again Saul was well behaved.* ***This is a change for the better in his behaviour****.* ***We believe that he is more relaxed since he started horseback riding therapy."***

On May 05, 2012 the mother reported that: *"We had a relaxed week. Saul was well behaved and one evening even helped me to prepare dinner. He felt very good about it.* ***He is much calmer these days and there are no anger outbursts."***

On May 13, 2012 the mother reported that: *"Saul went on a trip with his class and enjoyed it very much. He told us in details about his experiences during the trip, which was an indication for us that* ***he was in focus and was able to concentrate during the trip."***

On May 19, 2012 the mother reported that: *"**This week was a good one at home also in getting organised in the mornings,** but unfortunately, in school Saul had some difficulties, we would like to discuss this with you and see how we can help him."*

On June 02, 2012 the mother reported that: *"We had a wonderful week. Saul helped at home with preparing dinner. When I told Saul how wonderful it is when he is relaxed and well behaved, he was happy and said that he will try hard to continue behaving like that. Saul had his birthday yesterday, he got up with a good mood, his room was full with balloons and later he went with his father to a toy store to choose a present for himself. We had a nice and a relaxed day."*
On June 10, 2012 the mother reported that: *"Saul chose a game with many pieces that needed to be put together. He succeeded to put the game together and was very proud of himself. He put the game on a self for everyone to see. **Saul succeeded to be in focus and to concentrate, in order to put this game together. He succeeded, which shows us that there is a great deal of improvement in Saul's concentration and focusing since he started the therapeutic horseback riding sessions."***
On June 16, 2012 the mother reported that: *"**Saul is much more relaxed and in focus**. He asked his dad to join him and play football with the new team he joined. He was very excited to play with his dad."*
On June 23, 2012 the mother reported that: ***"Saul is waiting for his riding sessions. He told us that the riding helps him to concentrate and to focus more because of the exercises that you do with him on the horse."***
On July 14, 2012 the mother reported that: *"For Saul's good behaviour I bought him a stuffed animal and told him that it was a reward for his good behaviour. He wanted that stuffed animal for a long time, but I refused to buy it for him before. Saul promised to continue to behave nicely."*
On July 21, 2012 the mother reported that: *"Saul joined a summer camp and he enjoys it very much. I receive good feedback on his behaviour at the camp."*
On July 28, 2012 the mother reported that: *"Saul received a new book from us. He read the first few chapters already on the evening he received the book and was very excited and told us all about the story, especially some funny parts of the story. We see a big change in Saul's behaviour. When he gets upset, we remind him the way to relax as he was doing with you, take deep breath and relax. It works."*
On August 04, 2012 - "We have fixed our backyard and bought a swimming pool for the kids. Saul helped in organising the yard and played very nicely with his brother. We are planning to invite some of Saul's friends to play. Saul was very excited hearing it.

From the mother's weekly reports I was able to learn that there was an improvement in the following ADHD symptoms: Organisation, concentration, focusing, anger control and interpersonal relationships.
Saul's behaviour has changed already on the first week of starting therapy. While his usual behaviour was getting angry over small things, he succeeded to go bowling with his father, enjoyed the game and stayed calm:
"

APPENDIX G.2: Saul's Teacher reports;
Saul is a bright student. His contribution to the class discussion is valuable. He is interested in learning new things and likes to read. His behaviour in my class is

satisfactory but in other classes ***Saul is a restless child, moves constantly in his seat and it is hard for him to sit in class peacefully. In addition, Saul often behaves without thinking about the results of his actions, disturbs other children in the class, makes noises, is very sensitive and gets insulted easily, has difficulties in concentration, is influenced easily by others, does not understand fair play, blames others for his failures and has extreme mood swings***. According to the teacher *he allows himself to misbehave; he tends to fight with his classmates, and he talks without prior permission.* ***This behaviour keeps Saul from reaching his potential.*** *I made an agreement with Saul that whenever he feel that he needs to get out to relax, he will let me know. I will let him go out for a short time.*

Upon completion of THR sessions, the teacher reported to me that: *"Saul has improved in all aspects of his behviour and his academic achievement"*

APPENDIX G.3: Saul's weekly success lists:

1. During the meeting (Intake), I succeeded to sit for the whole hour and answer questions. My parents were very happy.
2. After my riding session I came home and organised my room and succeeded to read a book. In school I felt that I was going to talk too much during the lesson, so I asked the teacher to go out of the class so I can relax. I came back to the class and behaved nicely.
3. On Monday during the last lesson in school there was a lot of noise and I felt bad about it as if I am going to have an anger outburst so I asked the teacher permission to go out of the class to relax. I came back and succeeded to concentrate and be focused.
On Friday I behaved nicely during a group activity on "wise consumption".
The teacher wrote in my teacher-parents' communication notebook that I was relaxed and quiet during the whole day.
On Tuesday the teacher wrote in the teacher-parents' communication notebook that I was relaxed and nice during the whole day.
4. After the riding session we all went to a restaurant and my parents told me that I behaved nicely.
During one of the lessons in school I felt that it was difficult for me to sit quietly, so I have asked the teacher for permission to go out to relax and when I came back I was calmer and I behaved nicely.
On Tuesday I succeeded the whole day to be in focus and calm and the teacher said that I behaved excellently.
5. On Friday we had a family day for my brother in second grad and it was a lot of fun for me and also for the children in second grad.
6. On Monday morning I succeeded to get organised in the quickly and my parents were very happy and gave me a positive feedback. At school I behaved nicely the whole day. I was calm and relaxed and succeeded to listen to what the teachers said.
7. On Thursday I succeeded to control myself the whole day and I felt empowered.
On Monday during all the lessons I received only good feedbacks from the teachers.
On Tuesday I succeeded to control myself every time when I felt that it was difficult for me and that I was going to have an anger outburst. I received only good feedback from the teachers the whole day.
On Wednesday I behaved excellently the whole day, I succeeded to concentrate and be in focus.

8. The whole week I succeeded to control my anger outburst and I spent time in a camp and had a good time. Everybody was happy with me.
9. I succeeded to trot with the horse without the Dalia's help. I did slalom and had lots of fun.
On Wednesday we visited our aunt in Natania and I succeeded to play with my cousins and I behaved nicely and had fun.
We went to the sea of Galili and we had a great time.
10. On Saturday I succeeded to help my mom in baking cookies.
On Sunday we went back to school after the holiday and I succeeded in staying calm and focused the whole day. I had lots of fun.
11. I succeeded in helping my mom with the shopping at the supermarket. I pushed the cart and also helped in organising the groceries in the bags.
On Friday I succeeded to get organised in the morning very quickly and my parents complimented me on that.
12. I succeeded to sing very nicely at the school memorial day ceremony.
We went to the family park and I succeeded to win in the entire gulf games and in one of them I won with one strike.
We went to a restaurant after the riding sessions and my parents complimented me on my nice and polite behaviour.
On Wednesday my parents gave me the key to the house and I got in with my brother and we played nicely and waited until my mom got back from work.
13. This week I succeeded in helping my mom to prepare dinner and I even broke the eggs and mixed them. I served the dinner meal to the family.
We bought new plants for the garden and I succeeded in helping my father plant them when we got home.
14. This week was a very good week and nothing bad had happened. I was in control and succeeded to focus and concentrate in school.
We were building Leggo structure with many parts.
I went to a show with the class and when I saw that it takes too long, I called my mom to tell her that we are late so she would not worry.
On Saturday I had my birthday and I went to the store with my dad and chose a game for myself as a present.
15. On Saturday we went to visit my dad's family and I succeeded in behaving well and also won a game I played with my cousin.
On Monday we went on a school trip with my class and I rode on a donkey. I was very happy and I enjoyed myself.
16. I had a good week.
I succeeded to finish putting together the space ship that I received for my birthday and I put it on a shelf in my room. I was proud of myself.
On Friday my mom and my dad gave me the key to the house because they thought that they may come late and I should wait for them at home with my brother, but they came home before me.
17. This week we had a cafeteria day so I kept my brother's money so he will not loose it.
During one of the lessons it was difficult for me to sit and concentrate, so I asked the teacher to go out to relax. The teacher was proud of me and complimented me on my behaviour and wrote a note for my parents
18. I had many successes at the summer camp. I had fun and I behaved myself.
23. I helped Meir (our supervisor at the summer camp) at the camp. I succeeded to save a lot of money for the computer game that I want to buy.

24. My dad and my mom bought me a new book, which I wanted so much. I succeeded to read the book in three days.
25. I helped my dad to put the swimming pool in our back yard.
26. I succeeded to write five pages in one day in the summer notebook we received from school.

APPENDIX G.4: Research Diary: Saul

January 15, 2012 – Saul came with his parents and his younger brother to my clinic for our first meeting, the Intake. Saul cooperated with me and answered all my questions. He is a friendly child, and it seems to me that he understood that he would start therapy with me involving riding on a horse. The main issue that arose was his anger outbursts. According to the parents: "***Saul is a good student, but he is unhappy in school. Saul gets angry and tends to through tantrums over little things that upset him. He gets emotional and we cannot seem to control him when he is in that state."*** The parents reported to me that they feel very frustrated. They are being called to school twice or sometimes four times a week and they do not know what to do about it. They reported to me that their family therapist (whom I know) suggested that Saul would join my research on therapeutic horseback riding for children who were diagnosed having ADHD.
We set up long and short terms objectives. Saul said to me that his main issue was that: ***"People don't listen to me.*** *The teachers don't listen to me. That makes me very upset and unhappy. I don't like it there, in school.*" *Saul acknowledged his difficulties in controlling his anger outbursts an issue that was also validated by the ADHD inventory questionnaire. Both issues were incorporated in Saul's therapeutic programme, thus giving Saul a central voice in the therapy."*
The parents added that Saul loves to read books and is a very intelligent boy.

January 25, 2012 – My first therapeutic session with Saul. It was important for me that Saul will feel good and bond with the horse and me, so he will want to come back. I feel that Saul did feel good and was proud of himself for succeeding to follow my instructions. We started with working on the ground. I asked Saul to brush the horse and I have watched him. Saul did not show any signs of fear of the horse. On the contrary, he was eager to get on the horse. Saul is a bright boy and I have a good feeling about him in succeeding with our journey together.

February 1, 2012 – because of the rain we worked with the horses inside the stable. Saul learned how to take the horse out of its box and how to bring it in. In addition we watched the different horses in the stable and the way they interact with each other. We talked about the different character each of them has. Saul said to me: "***I am more like Papon*** (the horse Papon looked angry and was threatening the horse next to him) *I* ***would like to be more like Sol*** (who was relaxed and ignored the other horses that tried to bother him)." This was amasing for me to hear. My reaction was: "Great, you have a very good way of thinking, I am vey proud of you, high five!" Once the rain stopped we went out to the arena. I adapted the plan I had for that session and we worked on 'control': throwing a ring over a cone, bowling

(hitting a bottle with a ball). Saul succeeded and was happy. **I have asked him how did it feel in his body to be in control. Saul smiled and said *"great!"*** I asked Saul how he can use this outside the arena and he said: ***"Whenever I will feel angry I will remember this, and how I succeeded to control the horse, and I will tell myself that I can succeed to control my anger outbursts."***

Feb. 8th, 2012 – Saul rode on Ossi. We worked on concentration through holding the rains in the right position. He had difficulties in turning the horse to the different sides but once he succeeded, he told me that he learned not to give up until he succeeded and that made him feel proud of himself. In addition Saul said that he succeeded in the task because he was organised on the horse and in focus. Saul said to me: "this is very important to me when I ride." I asked him if he can see the importance of being organised and in focus, else where? He said: *"yes of course, now I can see how being organised and in focus can help me a lot in school and at home."*

Feb. 15th, 2012 – We worked on concentration, planning and performing. Saul succeeded in playing bowling while riding (throwing a ball on colored bottles). He was very proud of himself and talked about concentrating more in school and at home and succeeding to accomplish things, like reading. Saul said that whenever he succeeds he feels very happy and it pushes him towards more successes.

Feb. 22, 2012 – We have continued to work on concentration, planning and performing. Saul is advancing nicely. He sees the connection between what we learn on the farm and how to use it in school and at home. His mother told me that he is using the relaxation exercises that I thought him in order to relax and calm himself. He is much calmer and in focus.

March 7, 2012 – Saul came in a good mood. He rode on Joy. He likes riding on Joy. He was in control and held the reins in the right positions, also at the turns. He succeeded to trot with the horse.

March 14th, 2012 – It was a rainy day. We worked at the stable, putting the headgear on the horse and getting the horse out of its box and inside. We cleaned the horse's hoofs. Saul was afraid at the beginning to lift the horse's legs, but slowly he tried and succeeded. He was proud of himself and said ***"I should never give up, I should try hard until I succeed, in everything I do, just like I did now with the horse, and it felt great."***

March 21, 2012 – Saul rode on Baz. We worked mainly on paying attention to details so he can do the same in school and at home. I have asked Saul to sit in the right position with his back straight, hands down and heels down. He succeeded in turning the horse in slalom and was proud of himself.

April 4th, 2012 – I worked with Saul at the round pen (a round arena, usually used for training horses). He jogged by himself without the Lunge Line and was very happy.

April 11th, 2012 – Saul came in a good mood. He told me that now during Passover vacation he is allowed to get up whenever he wants. He is at home with his brother and they play together very nicely until his parents come home. He said: *"My parents are very proud of me that I take care of my brother and the house. I feel like a grown-up person."* Saul rode Joy, did slalom and trot all by himself.

April 22, 2012 – The mother reported that Saul had a few difficult days this week when he felt angry and could not control himself. We worked on relaxation. We went out on a field trip. Saul was on the horse leading it by himself and was happy to be out, taking deep breaths and relaxing.

April 29th, 2012 – We worked mainly on concentration that according to the mother was quite low this week.

May 6, 2012 – Saul asked to go out to a field trip on the horse. Saul said that the field trips helped him to concentrate. We talked about how he can use this in school and concentrate more especially during the lessons of other teachers and not his home class teacher. Saul said that he needed to work harder during these lessons and to remember what I told him during our trip.

May 20th, 2012 – Saul came to the farm very upset. **He reported to me that he was blamed by his friends in school for throwing a pencil case at one of the students and the teacher was vey upset with him. Saul said that he did not do that.** I asked Saul to go out on a field trip on the horse so he can relaxed. When we were walking Saul said that he was trying hard to behave himself in school, but finds himself to get into troubles. He does not understand why this was happening to him. We talked about ways that will help him to concentrate and be in focus so he does not get in trouble.

June 6th, 2012 – Saul came happy and reported to me that he had a good week in school and that **he was able to use the skills of concentration and focusing in school and it helped him to stay out of trouble.**

June 10th, 2012 – We worked in the arena for a while. Saul asked to go out on a field trip again. Saul said that he felt relaxed after a field trip on the horse and that it helped him to feel relaxed in school and at home. Saul reported that he had two good weeks when no teacher complained about his behaviour and he felt that this was thanks to the horses and the riding and what we talk and do during our sessions.

June 17th, 2012 – Saul came to the farm very angry with his father who told him to get ready quickly so they would not be late for our session. Saul said that he did not want to ride today because he is upset. Saul told me that his father threatened him that if he was not ready on time and they would miss the session, he would have to pay for that session from his allowance money. That made him very upset. I convinced him to get on the horse telling him that he did not miss the session and that no money would be taken from his allowance (after talking to the father). Finally, Saul rode on Joy outside the arena to calm himself down and to feel better, according to his words.

June 24, 2012 – We had a very good session. Saul succeeded to concentrate and focus and jogged on Joy by himself. He was very proud of himself.

July 10, 2012 – Saul was not in a good mood, but said to me that he would feel better once he is on the horse, and so it was. When I asked him how did he succeed to feel better he said that **riding on the horse helped him to relax and feel better. We talked about how he can also be more relaxed in school and at home.**

July 22, 2012 – Saul reported to me that **he succeeded to be more relaxed and in focus in school and at home.** He had a good week.

July 29, 2012 – Saul asked to wash the horse. I explained to Saul how to wash the horse and stressed the fact that it is very important to do it in a relaxed way. The mother reported to me that Saul was much more relaxed and in focus.

Aug. 5th, 2012 – Saul arrived in a very good mood. He asked to play at the arena with the games that we have. In order to succeed Saul needed to concentrate and to be in focus. He said to me **I feel good and I am in focus and I know I can succeed** and he did. Saul was very proud of himself.

Aug. 12th, 2012 – This was our last session. We summarised Saul's achievements and celebrated them.

APPENDIX G.5: A letter to me from Saul's parents at the end of therapy

To Dalia Kreindler
A letter from Saul's parents:

Our son Saul was treated by therapeutic horseback riding at EZ ranch for several months. To summarise the therapeutic riding experience and its effects on Saul's life, we can say that first the horseback riding was a new and exiting experience for Saul. At first, we felt that Saul did not draw the connection between the riding (which in his word, was fun) and apply what he learned during the lessons to the outside world. Unfortunately, we did not always know to answer the questions about the relationship between the two. Slowly, we felt that Saul and us as his parents, have learned to accept the tools and the tips we received from you and apply them in order to deal with Saul's anger and sometimes his violence towards his friends in school. There were times when Saul was able to act independently and calm himself and sometimes we needed to guide him or the teacher, who was informed and updated all this time of the process that Saul is going through.

We can say that there is a significant change for the better in Saul's behaviour; he is calmer, more focused and more organised. We definitely see and feel the improvement in Saul's daily conduct and with our coping with his behaviour. Saul is still angry, but less often and his anger outbursts are not accompanied by violent behaviour and loud voices as before. We know that the therapeutic horse back riding helped him to be calmer, more focused and more organised and especially control his anger outbursts.

We still have a long way to go, but we feel we are on the right track. We would like to take this opportunity and thank you for your caring, for you listening ear, for your patience and your sincere will to help our son. You were always available for us and you have spent time after time in guiding us and supporting us when we needed that. In addition we thank you for your conversations with the home class teacher in order to make sure that our son receive the right support in school and at home. We want to thank you for the time you spent in meeting with us, which were held after the riding sessions and your interest in our son and his experiences during the week. Your therapy was conducted with lots of love and warmth.

Thank you for everything,
With lots of love,
Saul and his parents.

APPENDIX G.6 A talk with Saul's mother eight months after therapy ended:

Saul's mother: *"I am happy to tell you that Saul is able to behave as you have taught him. It is not perfect yet and we still have to remind him from time to time, but overall he is much calmer and much more cooperative than the way he was before the therapy with you. I do feel that we are on the right path with him, or shall I say that he is on the right path."*

APPENDIX H: Terry's reports:

APPENDIX H.1:Terry's Parents Weekly Reports:

May 19th, 2012 -*It has been two weeks that we have started the therapeutic horseback riding sessions. We know that Terry loves horses even though they frighten her. We already see that she is much less afraid of the horses and she gained some skills from the sessions. She talked to us about her need to be more organised around the house and in school and most importantly for us, she stated that she needed to listen to us more, so we will not be angry with her.*
Terry was very happy that she received 80 in English and she started to do math exercises as we asked her to. We can tell that she is more concentrating on what she needs to do. On the other hand there are instances that she does not do what we tell her to do. She hears, but does not listen. She needs to be busy all the time otherwise she loses her balance and does stupid things like bothering her brothers and making noises around the house without stopping even when we ask her to stop.
June 3ed, 2012 – During the last two weeks we see an improvement in the way Terry is organising her room and the way she listens to us. She is calmer and there are less anger outbursts. We had lot of fun on the beach and during the holiday we were in Eilat and had a good time. Terry went to a Shavoot holiday party and had a great time. She went back to school feeling stressed due to the fact that there is a new girl who is joining her class.
Terry hurt her leg last week and unfortunately she fell three more times on the same leg and opened the wound.
June 10th, 2012 – The father reported: *We spent the whole day at the public pool. It was amasing for us how Terry was happy to be with her family that loves her so much and how* ***her behaviour had changed for the better. Terry told us that she is very happy and she loves the therapy at the farm with the horses.*** *We still see some problems with delayed gratifications. For instance Terry asked me to go and swim with her. I told her that I would go with her later. She became so mad at me. I reminded her what you have told me that she needed to be calmer and relaxed and not to get upset over everything. That calmed her down, and she waited patiently for me to come and swim with her.*
June 17th, 2012 - *We went to the beach together and it was a lot of fun. Terry had a dance performance and she succeeded to dance nicely. She was very excited and surprised that she succeeded. She thought that she would not succeed.*
June 24th, 2012 - *Terry told us that she loves to go to the farm and ride on the horse and that* ***she feels that it helps her to relax. We are trying to work with her on organising her room and how to be more patient like you do with her at the farm****, but it is still hard to stop her when she gets bully, sometimes she does succeed to stop herself. Terry made a grocery list and we succeeded to read it.*

July 1st, 2012 -*Terry gets upset very easily. For instance someone threw water on her and she got wet. Terry got extremely upset and cried in front of other people. Her reaction seemed out of proportion.*

July 10th, 2012 - *Terry enjoyed her time at the pool. It helped her to use a lot of energy and to relax.* ***She is more relaxed these days and we feel that the horseback therapy does help her.***

The father reported to me that: *Terry is waiting for the riding session. It affects her very much. I see the changes in her behaviour at home. There has been a big change in her attitude towards us. She speaks nicer to us. She started to say:* ***"daddy I love you"****. I hardly heard it before. This means everything to me. She even called me when I was at the army on reserve duty. She usually does not call me. This shows me that Terry made a big change since she started with the process of therapeutic horseback riding.*

July 15th, 2012 - *Terry went to sleep at a friend's home. It is the second time for her. Usually she was afraid to sleep at other people's homes without her parents. She enjoyed it and said that she had fun.* ***Terry is trying to listen to us more than in the past.*** *We wish that she would continue like this. The whole family is happy for her.*

July 22ed, 2012 - *We moved to a new house. Terry's good friend came to visit her in the new house. She had fun playing with her. She was relaxed and played very nicely with her friend.*

July 29th, 2012 - *Terry told us that she felt that she went through a big change since she started the therapeutic horseback riding. She is much happier with her achievements socially, academically and with her behaviour. We have friends who have a daughter Terry's age and they never got along before and now they get along and play nicely together. We believe that* ***learning to take care of the horse, another being, taught her to care for others as well (people).***

Aug. 5th, 2012 – *We went to the Sea of Galilee with all our friends and Terry's friends. Terry was very happy and had lots of fun. She is more open with us and with her friends and she shares her experiences and feelings with us.*

Aug. 12, 2012 - ***Terry is much more organised with her school bag and her room****. She is helpful at home. She washed the floors and helped in tiding the house. She understood that it is better for her to be calmer and relaxed like when she is with you at the farm around the horse, then we can listen to her and she can get what she wants. Getting upset and crying, gets her nowhere. This is a big achievement.*

Aug. 19th, 2012 – *We are on vacation and we went to a restaurant together. Terry behaved very nicely, the food was very good and we all enjoyed it very much. We can see that Terry is more in focus, listening to us, which was our biggest complaint, and we can see the changes in her since she started the therapeutic horseback riding sessions. During the vacation Terry helped her mom at her the Kindergarten where she works. Terry was very responsible, in focus and a big help to her mother; she organised the place and took care of the little kids.*

Nov. 25th - The father reported to me that: *Terry was eager to come back to the farm and ride. She kept telling us how much she misses the riding. We feel the changes in Terry. She talks more to us and she enjoys what she does. She had improved academically and her behaviour is more matured and she stopped with all the bulling and the fighting with her siblings. She is more organised, and in general she is much happier than before she started the Therapeutic Horseback riding programme with you.*

Appendix H.2:Terry's teacher report:

Terry is a very a happy child, she smiles a lot, and you can tell that she is happy when she succeeds. She succeeds in performing tasks, in sport. Terry has the ability to choose friends, to influence and to organise activities. Her body language tells that she is happy.

Appendix H.3:Terry's Lists of Successes:

** This week I succeeded to organise my school bag. I succeeded to study well. I succeeded to help my mom at home. I succeeded to be a good girl. I am advancing everyday.*
** This week I succeeded to listen to my parents. I succeeded to concentrate and do all my homework. I succeeded to listen to everything Dalia was explaining to me at the farm. I succeeded to organise my room and wash the floor. I succeeded in organising my cloths.*
** This week I succeeded to organise my room. Arrange my bed. I helped my mom. I listened to my parents. I succeeded not to hit my brother. I succeeded to do work in my notebook. I succeeded in organising my bookcase and my drawers.*
** I succeeded to vacuum the rug in my room. I succeeded to arrange my bed everyday. I succeeded to organise and clean my room.*
** This week I succeeded in getting more organised; I succeeded in organising my room and arrange my bed. I succeeded to clean the house and to help my mom to arrange the cloths. I succeeded in being a good girl.*
** This week I succeeded in listening to my parents. I succeeded in taking responsibility for my homework and my room.*
** This week I succeeded to listen to my dad and my mom. I succeeded to organise my room. I succeeded not to make a mess in the house.*
** This week I succeeded to focus and read a book. I succeeded to listen to my mom and my dad. I succeeded to organise my room.*
** This week I succeeded to listen, to focus. I succeeded not to make a mess and not to fight with N (my brother).*
** This week I succeeded to make order in my room. I succeeded to set up my bed every morning. I succeeded to fold my cloths all the time. I succeeded to vacuum the rug. I succeeded to organise my Barbies (dolls).*
** This week I succeeded to focus. I succeeded not to make a mess in the house. I succeeded to listen to my mom and to my dad. I succeeded not to shout and not to hit my brother.*
** This week I succeeded to focus and do what I was told by my mom and dad.*
** We are moving to a new house. This week I succeeded to pack my stuff. I succeeded to organise my room. I succeeded to organise my cloths. I succeeded to jog with the horse. I succeeded in doing all the chores. I succeeded to help my mom and my dad.*
** This week I succeeded to listen to my mom and to my dad. I succeeded to focus and listen to what Dalia explained to me. I succeeded to organise my room. I succeeded to wash the floor in my room. I succeeded in organising my cloths.*
** This week I succeeded to help my mom. I succeeded to organise myself on the horse and this way I succeeded in playing bowling while I am on the horse. I succeeded to organise my school bag and my room. I succeeded to arrange my bed*

and to wash the floor. I succeeded to wait patiently for my turn. I succeeded to listen to Dalia's explanation.
**This week I succeeded to listen to my dad and my mom. I succeeded to wash the dishes.*
I succeeded to help my grandmother. I succeeded in organising the house and my room. I washed the dishes. I succeeded in helping my mom.
**This week I was taking care of my baby sister. I helped my mom clean the house. I succeeded to do all my homework in one day. I succeeded to listen to my parents. When my parents told me to stop making a lot of noise with my brother, I stopped making the noise.*
I succeeded in taking responsibility to my school equipments. (13)
** This week we visited our relatives and I succeeded in having a lot of fun at the pool and on the beach. I feel good about myself and I know that the horseback riding helps me in being in focus when I study and also at home in listening to my parents. I feel the change in me since I started horseback riding therapy.*
** This week I succeeded to organise my books and my notebooks. I succeeded to help my mom with my baby sister and I washed the dishes. I also went shopping with mom and helped her with the grocery. I succeeded in listening to my mom and dad.*
In addition, I received an award from my teacher for behaving excellently in school, for investing in my studding, for volunteering in social activities during the year.
**This week I succeeded to fold the laundry and to wash the dishes. I succeeded to organise my bed and my room. I succeeded to help my mom to take care of my baby sister and my young brother.*
** This week I succeeded to concentrate in school and to listen to everything the teacher said. I succeed to listen to my parent and do everything my mom and my dad told me to do. I succeeded to fold the laundry and to wash the dishes.*
** This week I organised my room. I n addition, I succeeded in helping my mom with my sister and my brother. I succeeded in focusing in school and concentrate and listened to what the teacher told me to do.*
**This week I succeeded to help my mom clean the house. I succeeded to organise my room all by myself and I succeeded to concentrate and play games and at the end I won.*

APPENDIX H.4: Research diary:

May. 13th, 2012 - Terry arrived with her father for our first meeting, the Intake. Terry was very shy and unsure of herself. When I asked her about herself she looked at her father for answers.
The father said that the main problem that he and his wife had with Terry is that ***"she hears what we tell her, but she does not listen to us"***. The father described Terry as being very loud at home, as being active all the time, restless and hyper. He added that Terry tends to tease her younger siblings. She is not organised in her room and her cloths are all over the room.
Terry did not speak during the Intake.

May 20th, 2012 - Our first session started on the ground. I watched Terry near the horse. She was afraid of the horse and I was puzzled with the choice of therapeutic horseback riding for her. Terry was willing to get on the horse even though she was frightened by it. **When she got on the horse she held on to the saddle horn. Her**

whole body was tight. I asked her to let me know on a scale of 1 to 10, 1 being the lowest and 10 the highest, how fearful she was. Terry reported that her fear was at the level of 10. I lead the horse and asked her to breathe deeply. She took deep breaths. I talked to her and asked her to stretch her body. After 5 minutes the level of fear was reduced to 5. We walked slowly while she is holding one hand in the air and switching hands, until the fear level went down to 0. Terry said that she felt great. I have asked Terry to tell me what she gained by this session and she reported: I learned to calm myself and not to give up and that fear is something that I do to myself and I can also overcome it just like I did. I asked: How would you do it at home? Terry said that she would remember this lesson and overcome her fears everywhere else. She said that she is afraid to be alone and afraid to sleep at her friends' homes. I told her that I was proud of her and how she succeeded to overcame her fear, I said: "you did it' great for you!" high five!.

June 3ed, 2012 -Terry came to the farm with her mom. She was in a good mood looking forward to ride on Joy. When Terry got on the horse her fear level was 9. After taking deep breaths and walking slowly while I was leading the horse, the level of fear was reduced and she gave it the score of 3. Terry asked to go out from the arena to the field. I lead the horse and we talked about relaxation and concentration. We worked on how to take the relaxation home and to her school.

June 10th, 2012 - This time Terry arrived to the farm and reported that her fear level was only at the level of 2. Once she went on the horse the level of fear went down to 1 and later to 0. We worked on concentration while Terry was riding the horse in slalom, holding the reins in right position. Terry succeeded to turn the horse. I appraised her and we celebrated her success.

June 17th, 2012 - Terry rode Joy in the arena. She reported that she had no fear of being on the horse. We worked on organisation, concentration, planning and performing while she was playing basketball. Terry succeeded to concentrate and to hit the basket and was very proud of herself. We talked about how to transfer these skills to the house and the school. Terry reported to me that she had learned many skills this day and that she feels good about her achievements. Terry helped me to un-mount the horse and we washed the horse together. This is a big change in Terry's behaviour around the horse. She exhibits no fear of handling the horse.

June 24th, 2012 – Terry came to the farm in a good mood. She told me that she loves coming here and ride. Terry reported to me that she **succeeded to concentrate during music lesson (chorus), just like here on the horse.** We worked on focusing, concentration and being organised on the horse. Terry succeeded to hold the reins in the right position and to ride in slalom. She was very proud of herself.

July 1th, 2012 – Terry came to the farm with her mom. The mother reported to me that Terry gets upset very easily. She told me that in a social event, someone through water on Terry and she became very angry. The mother said that it was not easy to calm her down, but at the end she did calm down and understood that she over reacted.

Terry reported to me that our sessions are helping her to be more organised at home and in school. When I asked her how our sessions are helping her, she said that she learned to be organised at the farm near the horse, to concentrate better, to plan and to succeed in so many activities that she knew that she can take these successes elsewhere like the house and the school, as we talked about it so many times.

July 10th, 2012 – Terry came with her father who told me that when he was on reserve duty at the army Terry called him and told him that she loves him and misses him. The father said that he hardly heard that before and that this means everything for him. He added that Terry's attitude toward him changed completely and that she is more relaxed. In addition he said that when Terry gets upset, him and his wife remind her of her successes in the riding session and how she is relaxed around the horse and that calms her down.
We rode on Joy. I mentioned the wonderful things that the father had told me and celebrated her successes. We worked on planning her moves with the horse organising herself and concentrating. Terry succeeded in the slalom and in jogging by herself. Her fear was at the level of 0.

July 15th, 2012 – Terry came in a good mood. She was smiling and eager to start the lesson. Terry reported to me that she went to sleep over at a friend's house. She added that she used to be afraid to go a sleep over at friend's house, but since she started riding she is no longer afraid.
Terry succeeded to jog with Joy and also to hit a ring around a cone. She was very happy about her achievement. When I asked her how did she succeed, Terry said that she was concentrating and in focus.

July 22ed, 2012 – Terry came in a good mood. She told me that they moved to a new house and that she organised her room and put all her books in the bookcase and that she loved her room, even tough that she is sharing it with her sister.
Terry rode on Joy and succeeded to jog by herself. She asked to play games. I have asked Terry what she gains playing the games and her reply was that in order for her to succeed in the games, like bowling and basketball from on top of the horse, she needed to be organised, be in focus and plan her moves.

July 29th, 2012 – Terry came very happy. She showed me a long list of successes. She reported to me that she feels a big change in her behaviour and said: *"I am more organised; I succeeded to organise my new room and my library in the new house that we moved to."*
We worked with Joy. Terry helped me to prepare the horse for riding; brushing and saddling the horse. She was relaxed and showed no fear around the horse, so different from her behaviour when she first came here. Terry asked to do slalom and said that it helps her with concentration. She preformed a beautiful slalom.

Aug. 5th, 2012 – Terry came with her father. She reported to me that she had a great week. Now that she is on summer vacation she helps her mom at the kindergarten, taking care of babies and she loves it. She organises the toys, cleans and holds the babies.
We talked about the skills that she needed for that kind of a job, she said that she needed to be organised, be in focus and concentrate, just as we do here in the farm while riding. She succeeded in playing bowling, throwing a ring around a cone and playing basketball, all from top of the horse.

Aug. 12, 2012 – Terry reported that her level of fear is at level 0. We worked on concentration – first she rode around the arena in straight lines, reins in the right position. She played bowling and she jogged.

Aug. 19, 2012 – Terry rode on Joy. She practiced jogging and then asked to go out for a field trip on the horse. She practiced deep breathing, relaxation and enjoying the trip. Terry loves to go out on field trips. She told me that these trips help her to relax, to concentrate and to feel free and happy.

Nov. 25th, 2012 – Terry waited to come back to the farm and ride. We did not meet since August because I went overseas and I was wondering how this break would effect her. Terry came with her father who reported to me that Terry was eager to come back and ride. He also handed me the Weekly Parent's Report, which indicated the changes that Terry went through and how happier she is since she started my programme.
When Terry went on the horse (Joy), I checked her level of fear and she reported that it was at the level of 2. After warming up, walking around the arena on the horse, she felt calmer and said that her fear level went to 0. It was hard for Terry to concentrate and focus. We played a few games, bowling and throwing a ring around a cone. Terry succeeded in the games and was able to concentrate more.

Dec. 2ed, 2012 – Terry rode Joy. We worked on concentration and being accurate in moving the horse. Terry succeeded to concentrate and be in focus and moved accurately.

Dec. 16th, 2012 – When Terry arrived to the farm I just finished a session with a child who rode on Miss Piggy, a small horse (a pony), she asked if she could ride Miss piggy. She felt very good on Miss Piggy and rode with no feet in the stirrups. She wanted to play basketball and we worked on concentration.

Dec. 23ed, 2012 – Terry and her father arrived very late for the session. Terry rode Miss piggy again, but asked for a bigger horse for the next session.

Dec. 30th, 2012 – I prepared Raymond for Terry. A white male with good tempered. Terry was happy to ride Raymond even though he was taller than Joy, the horse she used to ride. We played games in order to strengthen her organisation, concentration, planning to hit the target and hitting the target. Her performance was accurate and she was very happy and proud of herself.

Jan. 14th, 2013 – Terry rode Raymond. She said she felt very comfortable on him. She asked to go out on a field trip. We went out and spoke about what she learned when she goes out on a field trip on the horse and what she can take from this and apply it in school and at home. Terry said that going out on a field trip makes her feel free, happy and in focus and she can use it in school and at home.

Jan. 20th, 2013 – Terry rode Raymond. Our session took place at the round pen. Terry jogged by herself. She reported a level of fear at 0. We worked on concentration, holding the reins at the right position with out holding on to the horn. Terry succeeded to concentrate and was in focus. Terry asked to go out on a field trip. She reported to me that she received the score of 98 in math and said that at the riding session she learned to concentrate and that she is able to listen to what the teacher says and to do as she says. Terry said that she is very satisfied with her schoolwork and that she feels that she had advanced a lot since she started the riding sessions.

Feb. 10, 2013 – Terry rode on Shalva who was a bit stressed today. Shalva jumped, but Terry was not afraid. I was happy about that. We worked on turning the horse in slalom and Terry played Bowling. When I asked her what skills she needed to use for the slalom and the games, her reply was that she needed to be organised on the horse, she needed to concentrate, plan her moves and execute them.

APPENDIX H.5: A letter to me from Terry's parents at the end of therapy:

Dear Dalia,

Thank you very much for your patience, your investment in Terry and for everything you have done for her.

Terry learned from you how to be patient and how to listen. We can see a great improvement in her advancement. She learned to listen, to take responsibility and to act and do chores independently.

We would like to thank you from the bottom of our heart for the time, the warmth and the love you have given Terry.

Terry's family

APPENDIX H.6 Eight months after therapy ended - *a talk with Terry's mother and father: Terry is still calm and very helpful at home. She takes care of the baby and she is friendly. No doubt the therapy with you changed her to the better. It is like having a different daughter at home. She is a pleasure to be with. Terry is much more open with us and demonstrate a lot of affection, which was not the case before the therapy. Thank you again.*

APPENDIX I

Summary of data by Therapeutic Objectives

Source	Skill and number of time in the reports	Examples	Appendix
Hillary's mother weekly reports	**Organised** **Hillary – 24 times**	*"Hillary insisted to…and to organise her bag for school."* *"Hillary is more organised"* *"More organised."* *"She also organised things around the house."* *"Being more organised helps her a lot."* *"Hillary organised her room…"* *"She succeeded to organise the…"*	
Saul's parents weekly reports **Saul's parents letter to me**	Saul – 10 times	*"…he was happy to organise it and design his room."* *"Saul had improved in getting organised in the morning."* *"This week was a good one at home and also in getting organised in the morning."* *"We can say that there is a significant change for the better…and that the THR helped him to be…more organised…"* *"We know that the THR helped him to*	

		be…more organised."	
Terry's parents Weekly report	Terry – 29 times	*" …we see an improvement in the way Terry is organising her room…"* *"Terry is much more organised with her school bag and her room."* *"…she organised the place…"*	
Hillary's teacher reports		*"She succeeds to get organised before the lessons."*	
Saul's teacher reports		*"Saul is more able to…be organised…"* *"Saul is more organised…"*	
Terry's teacher reports			
Hillary's success reports		*"I succeeded to be ready and organise at the beginning of every lesson."* *"I have started to be more organised."* *"I have started to be more organised…I organised my school papers…I organised my drawer."* *"I succeeded to keep my room organised." "I helped my mom to organise the house."* *"I succeeded to organise the toys."* *"I am more organised because I am relaxed."*	
Saul success reports		*"After my riding session I came home and organised my room…"* *"On Monday morning I succeeded to get organised quickly…"* *"On Friday I succeeded to get organised in the morning very quickly…"*	
Terry's success reports		*"…I succeeded to organise my school bag."* *"I succeeded to organise my room…"* *"I succeeded to organise my room."* *"I succeeded to organise and clean my room."* *"…I succeeded in getting more organised."* *"I succeeded to organise my Barbies."* *"I succeeded to organise my room. I succeeded to organise my cloths."* *"I succeeded to organise myself on the horse…"* *"I succeeded to organise my school bag and my room."* *"…I succeeded to organise my books and my notebooks."* *"I succeeded to organise my bed and my room."*	
Research Diary – On Hillary		*"She organised her bag to school…* *"Hillary was organised…"* *"She answered that she used organisation…"*	

On Saul **On Terry**		*"She feels in control…and more organised…"* *"…Saul said that he succeeded in the task because he was organised on the horse…"* *"…I can see now how being organised and in focus can help me a lot in school and at home."* *"She reported to me…I am more organised; I succeeded to organise my new room and my library…"* *"Terry reported to me that our sessions are helping her to be more organised at home and in school."* *"She reported to me that she feels a big change…and said: I am more organised; I succeeded to organise my new room and my library in the new house…"*	
Hillary's mother weekly reports	Concentrate	*"She is able to concentrate"* *"She is able to concentrate"* *"…the fact that she could concentrate …"*	
Hillary's teacher reports	Hillary -16 times	*"She is able to concentrate and succeeded to copy everything from the blackboard."* *"she can concentrate now."* *"There is a big improvement in her concentration during the lessons…"*	
Hillary's success reports		*"I pay attention to what you tell me and I concentrate."* *"I concentrate…"* *"I succeeded to concentrate during the lessons at school."* *"I am able to concentrate and be in focus."*	
Saul' parents weekly report	Saul – 16 Times	*"…There was an improvement in Saul's ability to concentrate."* *"Saul said that he tried very hard to concentrate at school and follow instructions and he was happy that he succeeded in both."* *"…Saul is behaving himself and able to focus and concentrate."* *"…he was in focus and was able to concentrate during the trip.""…able to concentrate.."* *"Saul succeeded to be in focus and to concentrate, in order to put this game together."* *"He told us that the riding helps him to concentrate…"*	

Saul's teacher		*"Saul is more able to concentrate"* *"Saul is able to concentrate now much more than before."*	
Saul's success reports		*"…I succeeded to concentrate…"* *"…"I succeeded to concentrate…"* *"I was in control and succeeded to focus and concentrate in school."*	
Terry's parents weekly reports	Terry – 11 times	*"We can tell that she is more concentrating on what she needs to do."*	
Terry's teacher			
Terry's weekly success reports		*"I succeeded to concentrate and do all my homework."* *"This week I succeeded to concentrate in school and to listen to everything the teacher said."* *"I succeeded in focusing in school and concentrate and listened to what the teacher told me to do."*	
Research Diary – Hillary **On Saul** **On Terry**		*Needed to concentrate…She did well."* *"I can do all that when I concentrate."* *"…she needed to concentrate…"* *"Hillary stated that she needed to be in focus, concentrate, and…"* *"Hillary reported to me that the THR helps her to concentrate at school…."* *"During Gem lessons she succeeded to concentrate…"* *"He was very proud of himself and talked about concentrating more in school…"* *"Saul said that the field trips helped him to concentrate."* *"Saul succeeded to concentrate…."* *"…He was able to use the skills of concentration and…"* *"Saul succeeded to concentrate…"* *"he is much calmer and in focus."* *"I feel good and I am in focus."* *"Terry succeeded to concentrate and to hit the basket…"* *"…She learned to be…to concentrate better."* *"She told me that these trips help her to relax, to concentrate…"* *"Terry succeeded to concentrate…"*	

		"Terry succeeded to concentrate…" *"…she learned to concentrate…"*	
Hillary's parent weekly reports. **Hillary's parents letter to me**	**Focus** Hillary -14 times	*"she is more… in focus"* *"She is able to… be in focus and listen to what we tell her"* *"She...able to...be in focus and copy from the blackboard…"* *"…be in focus and copy from the blackboard."* *"Hillary learned to plan, control and focus."*	
Saul's parents weekly reports **Saul's parents letter to me**	Saul – 26 times	*"…Saul is behaving himself and able to focus…"* *"…He was in focus…"* *"Saul succeeded to be in focus…"* *Saul's concentration and focusing since he started the THR."* *"Saul is much more …in focus…"* *"…the riding helps him to…focus…"* *"We can say that there is a significant change for the better in Saul's behaviour; he is calmer, more focused…"*	
Terry's parents weekly reports	Terry – 16 times	*"Terry is more in focus…"* *Terry was very responsible, in focus and…"*	
Hillary's teacher report		*"…be in focus* *"She succeeded …to stay in focus during the lessons…"*	
Saul's teacher report		*"Saul is more in focus"*	
Terry's teacher report			
Hillary's success reports		*"I am able to concentrate and be in focus."*	
Saul's success report		*"I came back and succeeded to concentrate and be focused."* *"…I succeeded the whole day to be in focus…"* *"…I succeeded to concentrate and be in focused."* *"…I succeeded in staying calm and focused the whole day."* *"I was in control and succeeded to focus…"*	

Terry's success reports		*"…I succeeded to focus and read a book."* *"…I succeeded to listen, to focus."* *"…I succeeded to focus and do…"* *"I succeeded to focus."* *"I feel the change, being in focus when I study…"* *"I succeeded in focusing in school…"*	
Research Diary **Hillary -** **Saul –** **Terry**		*"…she was in focus,…"* *"…I am in focus…"* *"Hillary stated that she needed to be in focus…"* *"She succeeded to…be in focus…"* *"She answered that she used …focusing…"* *"…she feels in control, focused and…"* *"Saul said that he succeeded in the task because he was organised on the horse and in focus."* *"…now I can see how being organised and in focus can help me a lot in school and at home."* *"Terry said that she was concentrating and in focus."* *"…she said that she needed to be…in focus…"* *"Terry succeeded to concentrate and be in focus and moved accurately."*	
Hillary's parents weekly reports	**Relaxed (not fidgeting)** **Hillary -13 times**	*"She is calmer and relaxed."* *"Hillary is more relaxed and happy."*	
Saul's parents weekly report	Saul – 17 times	*"He was relaxed and…"* *"We believe that he is more relaxed since he started horse back riding therapy."* *"We had a relaxed week."* *"We had a nice and a relaxed day."* *"Saul is much more relaxed…"*	
Terry's parents weekly report	Terry - 13	*"…it helps her to relax."* *"She is more relaxed these days…"* *"She was relaxed…"*	
Hillary's teacher report		*"She is more relaxed in her chair and does not get up and move as much as she used to do before."*	
Saul's teacher report			
Terry's teacher			

report			
Hillary's success weekly report		*"I am more organised because I am relaxed."*	
Saul's success weekly report		*"I go out of the class to relax."* *"I was relaxed…"* *I was calm and relaxed and succeeded to listen to what the teachers said."*	
Terry's success weekly reports		*"I feel more relaxed…"*	
Research Diary

Parents Weekly Reports **Saul parents letter to me**		*game and stayed calm."* *"…there were no anger outbursts…"* *"…he felt calmer after the riding …"* *"…there were no anger outbursts."* *"…he was calm and in control."* *"He was calm and listened to what we told him to do."* *"…he became calm…"* *"…he was calm and enjoyed himself very much."* *"He is much calmer these days and there are no anger outbursts."* *"We can say that there is a significant change for the better in Saul's behaviour; he is calmer…"* *"Saul is still angry, but less often and his anger outbursts are not accompanied by violent behaviour and loud voices as before."* *"We know that the therapeutic horse back riding helped him to be calmer…and especially control his anger outbursts."*	
Terry's Parents Weekly Reports	Terry – 17 times	*"She is calmer and there are less anger outbursts."* *"That calmed her down…"* *"She understood that it is better for her to be calmer…"*	
Hillary's teacher report		*"Hillary is calmer."*	
Saul's teacher report			
Terry's teacher report			
Hillary's Weekly Success Report		*"I controlled my anger outburst."* *"The whole week I did not have any anger outbursts"* *"I succeeded in understanding that the horse makes me feel calmer."* *"People, they can only listen to me when I am calm."*	
Saul's Weekly Success Report		*"…when I came back I was calmer and behaved nicely."* *"…I succeeded the whole day to be in focus and calm and the teacher said that I behave excellently."* *"…I was calm and relaxed and succeeded to listen to what the teachers said."* *"The whole week I succeeded to control my anger outbursts."* *"…I succeeded in staying calm…"*	

Terry's Weekly Success Report		*"I feel more relaxed and calmer than before."*	
Research Diary – Hillary **On Saul – On Terry**		*"She also succeeded in controlling her anger outbursts."* *"There are no more anger outbursts."* *"Hillary reported to me that she succeeded to be calm the whole week and that our last session did help her to relax and stay calm."* _____ *"He is much calmer…"* *"…She reported: I learned to calm myself…"* *"…she did calm down…"*	

APPENDIX J: Informed consent form:

Informed consent form for participating in the study with Children challenged by ADHD

I the undersigned:

First and Last name:_____

ID Number: _____

Address: _____

A. I declare that I am willing to participate in the study and declare that I agree that my son / daughter:_____ will also participate in this study as described in this form.
B. I hereby declare that I received explanations to my satisfaction that:
   1. That the researcher, Dalia Kreindler, MSW, received an approval to conduct the study, from the horse farm managers.
   2. That the researcher is part of a doctorate research programme established by the University of Derby
   3. That the topic of the research is Therapeutic Horseback riding with children challenged by ADHD.
   4. That I am free to choose if my son/daughter, will participate in the study or not and **I am free to stop at any time to participate in the study without compromising the right to receive treatment.**
   5. I was assured that our personal identity will be kept secret by all involved and in the study and will not be published in any publication including scientific publications.
   6. That the horse farm has an adequate insurance for the riding activities required by the study.
   7. I was assured that I will receive answers to questions that I will ask and also the possibility to consult with others (like a family doctor, relatives, etc.), when making a decision to participate in the research and/or to proceed in the research.
   8. That for any problem related to the research process, I can call Mrs. Dalia Kreindler, MSW, certified family therapist, Tel: 052-5277-601.

C. I hereby declare that I have received detailed information on the study, especially the following information listed below:

   1. Goals:
      I know that the objectives of the study are to examine the affect of therapeutic horseback riding on children diagnosed having ADHD, and to fulfill the therapeutic goals set at the beginning of the treatment.

   2. Methods: During the first meeting, during the completion of the Intake form, I have been told that the programme will last for 30 sessions.

   3. Expected benefit (to the participant): I was told that using therapeutic horseback riding may improve my son's /daughter's attention and or concentration at home and in school and the follow-up (the

research) after the child's performance will help to decide how to increase the effectiveness of the treatment.

4. Risks involved: I have been told of the dangers of sports-related therapeutic riding which are related to my son's/daughter's behaviour with the horse.

5. Payments: I have been informed that participating in the research programme involves a monthly fee for the sessions of my son/ daughter.

6. I have been informed that **the research results will be published in a way that will protect the identity of my son/daughter and my family and that it will not be possible to identify the participants in the study once it is published.**

D. I herby declare that the above consent was given voluntarily by me and that I understood all of the above. Likewise I received a copy of the informed consent form.

E. With my signature on this consent form, I allow the researcher and the institutional ethics committee direct access to the therapeutic portfolio to verify the clinical data, while maintaining confidentiality and in accordance with the laws and regulations of confidentiality.

Parent's name Id number signature date

_____

- If parents are separated/divorced, they both need to sign.

The researcher's declaration:

The above agreement was entered into by the participant's parent after I explained all the said above and I made sure that all explanations were understood by him/her.

The researcher signature date

_____

APPENDIX K: Confidentiality Waiver Form

The Client:

Family Name	Name	I.D. number	Date of Birth

I the undersigned, after I read and understood the content of this document, give hereby the right to Dalia Kreindler to receive information about the physical or mental health of our son/daughter from any source that teaches or treat her/him (doctor, teacher, psychologist etc.). This is for a doctorate research purpose only in the subject of therapeutic horseback riding and no other use. With that I release all the people who treat my son/daughter from their duty to keep confidentiality and allow them to provide the information required to Dalia Kreindler who works at the E.Z farm.

I will not have any claim or legal action of any kind in connection with the delivery of such information, not toward Dalia Kreindler and not toward E.Z. farm.

I understand that the confidentiality waiver is serving the adjustment of therapy that my son/daughter receive in the farm and that the findings, once disseminated, will do so while maintaining the confidentiality and anonymity of the clients, so that nothing will identify my son/daughter.

Signature _____

APPENDIX L: Registration's Form

Registration: **Date: _____**

Rider's name: _____ Date of Birth: _____

Address: _____

I the undersigned _____ would like my son/daughter to participate in therapeutic horseback riding programme.

I agree that the instructor will be: _____

I received an explanation on the risks involved in riding and on the security measures used in the farm.

I know that my child should come for the sessions dressed suitably for riding, in long pants and closed shoes.

I hereby agree to wave medical confidentiality and ready to transfer therapeutic riding instructors any information, which could assist them in therapy.

Parent's signature: _____ I.D. number: _____

APPENDIX M: Letter to the Parents

Date:_____

Dear Parent,

You are invited to participate in a doctorate research on the subject of therapeutic horseback riding and its influence on children challenged by ADHD, this in order to contribute significantly to your child's development and to show the contribution of therapeutic horseback riding.

I am asking for your help with the conduct of the research. The data that you will provide will effect the therapeutic horseback riding programme, which will be adjusted to meet your child's needs.

In these sessions the well being of your child is our first priority and only then comes the research. Your child is participating in therapeutic horseback riding on E.Z. Farm, which is located in K.V.

We are thankful for having decided to participate in the research and ask you to complete the different forms concerning your child. Your collaboration, your child's collaboration and that of his/her homeroom teacher are very important to the progress of the therapy and to the research. It is recommended that the same parent complete all of the forms.

It is very important that the home schoolteacher complete the questioner he/she will receive from you and that he/she understands from you the importance of his/her collaboration with the programme. It is a short questioner and you are kindly requested to pass it on to the teacher, collect it after completion and return to me as soon as possible.

We are very careful with the ethic considerations in our research and we are not going to publish any identifying details about the child or his/her teacher. The information you will provide will remain confidential.

It is important that you know that you have the right to terminate your participation in the research programme at any time you wish to.

Further, if you want, I will be happy to share with you the findings of the research.

If you have any questions or would like to share any additional information, you can contact me: Dalia Kreindler, mobile: 052-5277-601.

Thank you kindly,

Dalia Kreindler, MSW
Certified Family Therapist
Certified Therapeutic Horseback Riding Instructor
A Doctoral Candidate at Derby University, England
052-5277-601

APPENDIX N: Parents' Intake Form:

Place:_____ Date:_____

Therapist's Name : _____

Client's Name: _____ Date of birth: _____ Age: ___

I.D. #: _____ Sex: F/M Health Insurance Company: _____

Tel: _____ Cell Phone: _____

Height: _____ Weight: _____

School: _____ Grade: _____

Name of Home school Teacher: _____

Address: _____

E-mail address: _____

Mother's Name:_____ Cell Phone: _____

Occupation: _____ Education: _____

Father's Name: _____Cell Phone: _____

Occupation: _____ Education: _____

Parents are together/separated-divorced/A new family

Children in the family:

Child's name	**Sex**	**Date of Birth**	**Comments**

Personality and character:

Hobbies and interest: _____

Describe the difficulties:

How does the difficulty manifest itself: e.g. behavioural problems, anger outbursts, physical/verbal violence and so on:

_____

Overall functioning in the educational system: _____

Subjects that he/she does not like:

_____

Development History:

During pregnancy: _____

Duration of pregnancy: Week #_____

During birth: _____

Weight at birth: _____

Stages of Development:

Sequence _____

Rhythm _____

Movement quality _____

Medical Information:

Epilepsy _____

Allergies _____

Prescribed Medicine _____

Side effect due to Medicine _____

Control of: Bowel movement _____ Urine _____

Osteoporosis _____

Other illnesses _____

Hospitalisation and surgeries _____

Senses:

Sight _____ Glasses: yes/no Color blindness _____

Hearing _____ Hearing aid: yes/no

Sensation (Hyper/Hypo) _____

Communication and Cognition

Articulate _____

Comprehension _____

Writing _____

Reading _____

Memory: Short term _____

Long term _____

Motor difficulties

Posture/sitting/walking/running _____

Pelvic structure defects and spine _____

Contracture _____

Muscle tone _____

Hands _____

Legs _____

Back _____

Involuntary movements _____

When did you first notice the difficulty, at what age? _____

Does any one else in the family have the same difficulty? _____ Who

_____

Para Medical Treatments received in the past and currently receiving

Type of Treatment	At Age	Duration of Treatment	Comments

Describe the Family System

_____

_____

_____

_____

_____

Contact with the environment

How does he/she get along with other children? _____

_____

Does he/she have any friends _____

How does he/she get along with adults _____

_____

Everyday functioning

He/she is/is not independent _____

Therapeutic Riding

Who referred you to Therapeutic Horseback Riding?

_____

What was the reason you were referred to Therapeutic Horseback Riding?

_____

Diagnosis and Check-ups – Please attach all Diagnosis

_____

_____

Did he/she ride in the past? _____

What do you expect to gain from the Therapeutic Horseback Riding?

_____

_____

_____

_____

_____

_____

General Comments;

_____

_____

_____

_____

Therapeutic Horseback Riding Practitioner's Signature

_____

APPENDIX O: ADHD Inventory Form:

ADHD Symptoms	Scores before treatment	Scores after 30 sessions
1. Capable of concentrating for	minutes	minutes
2. Easily distracted		
3. Difficulties listening to verbal instructions		
4. Difficulties in learning new games and new skills		
5. Does not know how to listen		
6. Difficulties in sitting quietly in one place for more than	minutes	minutes
7. Difficulties in communication skills		
8. Impulsive		
9. Gets bored easily		
10. Difficulties in following verbal instruction		
11. Difficulties in organising work or the room		
12. Delays doing things need to be done		
13. Difficulties in starting things		
14. Starts doing things but does not finish		
15. Does not finish homework		
16. Inconsistent appearance		
17. Tends to be diverted		
18. Difficulties in self image		
19. Difficulties in keeping friends		
20. Avoiding group activities or sporting events		
21. Gets angry easily		
22. Has difficulties falling asleep		
23. Has difficulties waking up		
24. Often tired		
25. Mood swings		
26. Difficulties in planning activities		
27. Gets hurt easily		
28. Gets frustrated easily		
29. Often has behavioural problems in school		

APPENDIX P: Self Esteem Score before (B) THR Sessions and After (A) 30 Session:

	This child	I am definitely like him/him	I am like him/her	I am a bit like him/her	I am not so much like him	I am definitely not like him/her
1	Is nice					
2	Participates a lot in school					
3	Wants to be appreciated as a good student					
4	Knows a lot on different subjects					
5	Loved by his/her classmates					
6	It is important for him to receive good grades					
7	Is talented in studding					
8	Has good ideas					
9	Makes sure that he/she is not late for class					
10	You can learn a lot from him/her					
11	When he speaks, other children listen to him/her					
12	His/her classmates like to play with him/her					
13	Is a good student					
14	Is shy to ask when he/she does not understand					
15	It is very pleasant to be with this child					
16	Knows how to prepare a topic and to tell about it in class					
17	Knows how to express himself					
18	Has many friends					
19	Has a great influence on his/her classmates					
20	His/her ideas are accepted by his/her friends					
21	Is a good student					
22	It is beneficial to study with him for exams					
23	His/her classmates do what he/she tells them					
24	Is very smart					
25	Makes friends easily					

APPENDIX Q: Parent's weekly report

Child's name: **Parent's name:**

Date:

#	Weeks/ Therapeutic Objectives	1	2	3	4	5	6	7	8	9	10
1	Organization										
2	Concentration										
3	Focused (not distracted)										
4	Relaxed (does not fidget)										
5	Calm (no anger outbursts)										
6	Self-confidence										
7	Self-image										
	Sum										
	Average Score										

Describe happy experiences that your son/daughter had: _____

_____

_____

When you talked to your child about the happy experience, what words did he/she used: _____

_____

Additional comments: _____

Thank you very much

Dalia Kreindler, MSW
Certified Family Therapist,
Certified Therapeutic Riding Instructor
A Doctoral Candidate at Derby University, England
052-5277-601

APPENDIX R: **Expert Validation of the Manual – Stage Six**

Dear _____,

For the past three years I have been conducting research in the field of Therapeutic Horseback Riding (THR). In Israel Therapeutic horseback riding professionals receive a year of instruction and are certified by the Ministry of Sport and Culture.

Following are a set of statements that represent the conclusions drown from my research. Please read them and indicate the degree of agreement you feel best describes your experience in the field.

Please use a scale of 1 to 5,
1 - 'I don't agree with the statement,
2 - 'I slightly agree',
3 - 'in some instances I agree and in some I don't',
4 - 'I mostly agree',
5 - 'I fully agree'.

In addition to the number indicator, please explain your choice and where possible, give examples from your experience.

1. Therapeutic Horse Back Riding (THR) is a form of Equine Assisted Therapy. Its most important feature is that it is therapy and not a recreational activity. THR practitioner, parents, child and teachers should be fully aware of that fact.

1 2 3 4 5
Explanation and example:
_____
_____

2. A therapeutic alliance between THR practitioner, parents, child and teachers is most important for the success of the therapy.

   1 2 3 4 5
Explanation and example:_____
_____

3. The main engine of the therapeutic process is the formulation of a common therapeutic vision and therapeutic objectives.

1 2 3 4 5
Explanation and example:_____
_____

4. Part of the therapeutic process requires following-up the client's movement towards and his achieving of his therapeutic objectives.

1 2 3 4 5
Explanation and example:_____

_____

5. The effectiveness of THR is enhanced by the use of reinforcement and the exclusion of aversive control (punishment, criticism, raising of voice).

1 2 3 4 5

Explanation and example _____

_____

6. By facilitating reflection on the child's successes the THR practitioner demonstrates the relevancy of skills learned during the therapy sessions.

1 2 3 4 5

Explanation and example:_____

_____

7. Learning from successes contributes to the growth and development of the child.

1 2 3 4 5

Explanation and example_____

_____

8. The transfer of skills learned during THR sessions to the school and the home are indices of THR effectiveness.

1 2 3 4 5

Explanation and example:_____

_____

9. The amplification of successes is a learning motivator.

1 2 3 4 5

Explanation and example:_____

_____

Thank you,
Dalia

'L'

Dear L.

For the past three years I have been conducting research in the field of Therapeutic Horseback Riding (THR). In Israel Therapeutic horseback riding professionals receive a year of instruction and are certified by the Ministry of Sport and Culture.

Following are a set of statements that represent the conclusions drawn from my research. Please read them and indicate the degree of agreement you feel best describes your experience in the field.

Please use a scale of 1 to 5,
1 - 'I don't agree with the statement,
2 - 'I slightly agree',
3 - 'in some instances I agree and in some I don't',
4 - 'I mostly agree',
5 - 'I fully agree'.

In addition to the number indicator, please explain your choice and where possible, give examples from your experience.

1. Therapeutic Horse Back Riding (THR) is a form of Equine Assisted Therapy. Its most important feature is that it is therapy and not a recreational activity. THR practitioner, parents, child and teachers should be fully aware of that fact.

1 2 3 4 **5**
Explanation and example: **It is important that the client is fully aware of the fact that it is about a therapeutic intervention as a purpose to help the client in his process. During intake, I always make a clear statement about that so I am sure the client understands he does not come to "play" with the horses, but do comes to improve some (social) skills. The therapeutic intervention with the horses supports the client in his development, the intervention is one element to reach the goal the client and therapist have determined together.**

2. A therapeutic alliance between THRP, parents, child and teachers is most important for the success of the therapy.

1 2 3 4 **5**
Explanation and example: Seen from a contextual point of view, **it is indeed important that there is alliance and understanding between the various persons connected to the client.** Information has to be shared so everyone connected to the client can help and support the client. Ex. **I work a lot with teenagers who stay temporarily in a shelter. Communication between the various parties involved is important to work together, so that the energy of each therapeutic intervention can improve success.**

3. The main engine of the therapeutic process is the formulation of a common therapeutic vision and therapeutic objectives.

1 2 3 4 **5**
Explanation and example: **Definitely! With every client, I discuss the possibilities, priorities to choose and in the end, we set a goal the client want to reach. Every session we work on it and sometimes discuss if we have to adjust the goal or maintain.**

4. Part of the therapeutic process requires following-up the client's movement towards and his achieving of his therapeutic objectives.

1 2 3 4 **5**

Explanation and example: **Indeed! In the beginning of a session, I question the client about things that happened in between 2 sessions so the client is getting insight whether he is able to integrate the skills in everyday life.**

5. The effectiveness of THR is enhanced by the use of reinforcement and the exclusion of aversive control (punishment, criticism, raising of voice).

1 2 3 4 **5**
Explanation and example: **Positive comment, naming and repeating qualities and strengths of the client is important to improve the self. I never use aversive control. I notice that in talking to the client in a positive way, it helps them to believe in themselves. Non-verbally signs tell me that the client integrates the positive comment.**

6. By facilitating reflection on the child's successes the THRP demonstrates the relevancy of skills learned during the therapy sessions.

1 2 3 4 **5**
Explanation and example: **During sessions, I always emphases the success and relate this success to every day life so the client can understand it is about using the same skill in another situation. Even small children can understand that easily when explained in a language adapted to their age.**

7. Learning from successes contributes to the growth and development of the child.

1 2 3 **4** 5
Explanation and example: **Success is important, indeed. Sometimes it is good to let grow frustration. In these situations, the therapist has to be very alert so that the frustration and negative experience can be transformed into a positive experience. Example: A teenager (13 year) had difficulties to express her feelings. During the therapeutic session with the horses, she was not successful during the exercise. I chose not to support her verbally, but let her go into frustration. She started to cry. We discussed what happened, and she was prepared to share a secret with one of the horses. She and the horse shared an intimate moment. After that, she started herself exercising again. I didn't ask nothing. In the end of that session, she was successful. She learned a lot from the fact she was not successful in the first place.**

8. The transfer of skills learned during THR sessions to the school and the home are indices of THR effectiveness.

1 2 3 4 **5**
Explanation and example: **I have the impression that children learn a lot from working with horses. It is easier for them to learn new skills in interaction with the horses, and then transfer it to everyday life. There is a direct result to notice in society, they have to learn to deal with. A mother told me that her son was getting more confident after the sessions with horses. He was more assertive at school and emotionally, he was feeling better as well at home as in school.**

9. The amplification of successes is a learning motivator.

1 2 3 4 **5**

Explanation and example:
I**ndeed! It is very important to emphasize every success the client makes.**
I also often repeat the successes the client has made so the client can integrate the wonderful feeling the success creates.
It increases the feeling of self-esteem.

'A'

Dear A.,

For the past three years I have been conducting research in the field of Therapeutic Horseback Riding (THR). In Israel Therapeutic horseback riding professionals receive a year of instruction and are certified by the Ministry of Sport and Culture.

Following are a set of statements that represent the conclusions drown from my research. Please read them and indicate the degree of agreement you feel best describes your experience in the field.

Please use a scale of 1 to 5,
1 - 'I don't agree with the statement,
2 - 'I slightly agree',
3 - 'in some instances I agree and in some I don't',
4 - 'I mostly agree',
5 - 'I fully agree'.

In addition to the number indicator, please explain your choice and where possible, give examples from your experience.

1. Therapeutic Horse Back Riding (THR) is a form of Equine Assisted Therapy. Its most important feature is that it is therapy and not a recreational activity. THR practitioner, parents, child and teachers should be fully aware of that fact.

1 2 3 4 5
Explanation and example: This statement covers more than one issue.
Therapeutic Horse Back Riding is a form of Equine Assisted therapy (5)
Equine Assisted therapy can be considered both recreational and therapeutic as it treats the mind, body and soul (definition of recreation- Oxford dictionary, mental and spiritual consolation)
THR practitioner, parents, child and teachers should be made fully aware that by choosing THR they are choosing a generational technique that has benefited many thousands of children. (5) For example: **My daughter had some serious problems of control with anxieties- at the age of 8 she was wetting her bed each night. After participating in the therapeutic riding program she no longer wets her bed.** She has changed and we are very happy- there is a much more relaxed feeling in the house.

2. A therapeutic alliance between THR practitioner, parents, child and teachers is most important for the success of the therapy.

1 2 3 4 5

Explanation and example: THR/EAA/T **can only be successful in all environments if it includes all the above persons. 40% of the cure comes from the person, family backing, and motivation.**

3. The main engine of the therapeutic process is the formulation of a common therapeutic vision and therapeutic objectives.

1 2 3 4 5

Explanation and example: **There must be a common vision and objectives,** but these are meaningless unless you recognize that the main engine/ catalyst to achieve these goals is the horse. The horse is the technique, which the TR practitioner must be fully able to use. The practitioner must be able to leverage the properties of the horse so that he or she can start the therapeutic process.

4. Part of the therapeutic process requires following-up the client's movement towards and his achieving of his therapeutic objectives.

1 2 3 4 5

Explanation and example: Without follow up the therapy is left open ended.

5. The effectiveness of THR is enhanced by the use of reinforcement and the exclusion of aversive control (punishment, criticism, raising of voice).

1 2 3 4 5

Explanation and example: **Only positive reinforcement works. Example: A child was in a riding therapy session when her instructor shouted to her that her horse was stupid- she took this personally, left the session crying and never came back to EAA/T again.**

6. By facilitating reflection on the child's successes the THR practitioner demonstrates the relevancy of skills learned during the therapy sessions.

1 2 3 4 5

Explanation and example: **This is extremely important. Reflection requires the practitioner to write down what happened, what was observed, where were the high points and what did the person respond to. Any therapeutic process requires a practitioner to be able to review their therapeutic sessions its achievements or non-achievements in order to build future goals. Reflection allows a practitioner to continue from week to week**.

7. Learning from successes contributes to the growth and development of the child.

1 2 3 4 5
Explanation and example: Extremely important motivation- raised self-esteem, self-control, empowerment, organizational skills and more…

8. The transfer of skills learned during THR sessions to the school and the home are indices of THR effectiveness.

1 2 3 4 5
Explanation and example: **When a child learns under the guidance of a THR practitioner to negotiate with a horse in order to achieve a riding goal, they have been taught a transferable skill that can be used back at home or in any other environment.**

9. The amplification of successes is a learning motivator.

1 2 3 4 5
Explanation and example: Success can be measured in many ways sometimes it is can be seen as the effort a child has made to participate in a group riding session. If a child **is given the opportunity to recognize that their effort had a positive effect not only on his or her riding ability, but also on the group and the practitioner he or she become empowered, motivated and have a desire to return the following week to continue their sweet success.**

‘Lo’

Dear Lo.,

For the past three years I have been conducting research in the field of Therapeutic Horseback Riding (THR). In Israel Therapeutic horseback riding professionals receive a year of instruction and are certified by the Ministry of Sport and Culture.

Following are a set of statements that represent the conclusions drown from my research. Please read them and indicate the degree of agreement you feel best describes your experience in the field.

Please use a scale of 1 to 5,
1 - ‘I don’t agree with the statement,
2 - ‘I slightly agree’,
3 - ‘in some instances I agree and in some I don’t’,
4 - ‘I mostly agree’,
5 - ‘I fully agree’.

In addition to the number indicator, please explain your choice and where possible, give examples from your experience.

1. Therapeutic Horse Back Riding (THR) is a form of Equine Assisted Therapy. Its most important feature is that it is therapy and not a recreational activity. THR practitioner, parents, child and teachers should be fully aware of that fact.

1 2 3 4 5

Explanation and example: I think **THR is aimed at improving the quality of life of special riders. The recreational activity part works as a strategy to fulfill aims and goals.**

2. A therapeutic alliance between THR practitioner, parents, child and teachers is most important for the success of the therapy.

1 2 3 4 5
Explanation and example: no doubt about it.

3. The main engine of the therapeutic process is the formulation of a common therapeutic vision and therapeutic objectives.

1 2 3 4 5
Explanation and example:

4. Part of the therapeutic process requires following-up the client's movement towards and his achieving of his therapeutic objectives.

1 2 3 4 5
Explanation and example:

5. The effectiveness of THR is enhanced by the use of reinforcement and the exclusion of aversive control (punishment, criticism, raising of voice).

1 2 3 4 5
Explanation and example: mostly.

6. By facilitating reflection on the child's successes the THR practitioner demonstrates the relevancy of skills learned during the therapy sessions.

1 2 3 4 5
Explanation and example: the reflection on the child successes does not always demonstrate the relevancy of the skills. I think that the positive effects of a the reflection on the child shows the relevancy.

7. Learning from successes contributes to the growth and development of the child.

1 2 3 4 5

Explanation and example: **Yes but at a certain point some need to face challenges with no immediate success in order to learn assiduity, tenacity, capacity to solve problems and learn to deal with learning process.**

8. The transfer of skills learned during THR sessions to the school and the home are indices of THR effectiveness.
1 2 3 4 5

Explanation and example: sure

9. The amplification of successes is a learning motivator.

1 2 3 4 5
Explanation and example: **most of the time. Still some kids need to feel objectivity in order to trust the instructor. Amplifications of success may work in both ways.**
